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**Chinese International Students' Cross-Cultural Adjustment in the U.S.:
The Roles of Acculturation Strategies, Self-Construals,
Perceived Cultural Distance, and English Self-Confidence**

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**The Roles of Acculturation Strategies, Self-Construals,
Perceived Cultural Distance, and English Self-Confidence**

by

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*This dissertation is dedicated to my family, my friends,
and my dear Heavenly Father*

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Chinese International Students' Cross-Cultural Adjustment in the U.S.:
The Roles of Acculturation Strategies, Self-Construals,
Perceived Cultural Distance, and English Self-Confidence

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Among all the international students enrolled in the U.S. colleges or universities, Chinese international students, including those who come from Taiwan, mainland China, and Hong Kong, accounted for 16.7%, which is a fairly high percentage (Institute of International Education, 2004). They may encounter very unique acculturative stress because of different cultural norms and academic expectations between Chinese and American cultures. Ward and her colleagues (1990) claimed that cross-cultural adjustment can be best examined from two fundamental dimensions: psychological and sociocultural adjustment. These two dimensions are conceptually distinct but empirically related.

The purpose of the present study is to investigate the influences of acculturation

strategies (Berry, 1980), self-views in relation to others (Markus & Kitayama, 1991; Kagitcibasi, 1996 & 2005), perceived cultural distance (Babiker et al., 1980), and English self-confidence (Clement & Baker, 2001) on different dimensions of Chinese international students' cross-cultural adjustment. Research questions and hypotheses were focused on how each factor affects the cross-cultural adjustment, and how these factors interact with each other as they generate impacts on adjustment.

177 international students of Chinese heritage from Mainland China, Taiwan, and Hong Kong participated in the study. They were asked to fill out self-report questionnaires about their demographic information, acculturation strategies, self-construals, perceived cultural distance, English self-confidence, and psychological and sociocultural adjustment in the U.S. Results indicated that length of residence in the U.S., participation in the host society (one dimension of acculturation strategies), direct communication, autonomy (sub-dimensions of independent self-construal), and English self-confidence were positively correlated with psychological adjustment. On the other hand, length of residence, marital status, direct communication (a sub-dimension of independent self-construal), perceived cultural distance, and English self-confidence were positively associated with sociocultural adjustment. In addition, a few mediating effects were revealed: (a) Independent self-construal mediated the relation between participation in the U.S. society and sociocultural adjustment; (b) English self-confidence mediated the relation between participation in the host society and cross-cultural adjustment; (c) English self-confidence mediated the relation between independent self-construal and sociocultural adjustment. Limitations and implications for future research are discussed.

TABLE OF CONTENTS

Chapter 1: Introduction	1
Chapter 2: Review of Literature	6
An Overview of International Students' Adjustment	6
Chinese International Students' Cross-Cultural Adjustment	8
Dimensions of Cross-Cultural Adjustment	10
Acculturation Strategies and Cross-Cultural Adjustment	12
Definition of Acculturation	12
Two Levels of Acculturation: Cultural vs. Individual Level	14
Acculturation Framework	15
Acculturation Strategies	18
Acculturation Strategies and Adjustment: Empirical Suggestions	20
Self-Construals and Cross-Cultural Adjustment	22
Basic Concepts of Self-Construals: Independence vs.	
Interdependence	22
Dimensions of Independence and Interdependence	23
Self-Construals and Cross-Cultural Adjustment: Empirical	
Evidence	32
Cultural Distance and Cross-Cultural Adjustment	34
Cultural Distance and Adjustment: More Empirical Suggestions	35
Language Self-Confidence and Cross-Cultural Adjustment	33
Language Self-Confidence and Adjustment: Empirical Evidence	38
Self-Construals and Language Self-Confidence	40
Chapter 3: Proposed Research Study	42
Research Questions and Hypotheses	42
Research Question 1	42
Research Question 2	44
Research Question 3	45
Research Question 4	46
Research Question 5	47
Research Question 6	49

Research Question 7	51
Research Question 8	53
Methods	56
Participants and Procedure of Recruitment.....	56
Measures	57
Plan for Data Analysis	62
Factor Analysis	62
Correlation Analysis	63
Multivariate Analysis of Variance (MANOVA)	63
Multiple Regression Analysis	65
Chapter 4: Results	67
Descriptive Statistics of the Sample	67
Psychometric Analysis of the Sample	70
Factor Analysis	70
Reliabilities of the Scales	87
T-tests for the Differences between the Mainland Chinese and Taiwanese	
Groups	89
Effects of Demographic Variables	90
Categorical Variables: Gender, Major, Marital Status, Etc.	90
Continues Variables: Age, Length of Residence in the U.S., Etc.	92
Hypotheses Testing	95
Research Question 1	95
Research Question 2	103
Research Question 3	111
Research Question 4	111
Research Question 5	112
Research Question 6	119
Research Question 7	122
Research Question 8	124
Chapter 5: Discussion	131
Effects of Demographic Variables	131
Acculturation Strategy and Cross-Cultural Adjustment	134
Self-Construals and Cross-Cultural Adjustment	137
Perceived Cultural Distance and Cross-Cultural Adjustment	141

English Self-Confidence and Cross-Cultural Adjustment	142
Predictors of Psychological and Sociocultural Adjustment	143
The Moderating Effect of Perceived Cultural Distance between Acculturation Strategies and Cross-Cultural Adjustment	144
The Mediating Effect of Self-Construals between Acculturation Strategies and Cross-Cultural Adjustment	145
The Mediating Effect of English Self-Confidence between Acculturation Strategies and Cross-Cultural Adjustment	147
The Mediating Effect of English Self-Confidence between Self-Construals and Cross-Cultural Adjustment	150
Limitations of the Current Study and Implications for the Future Studies	151
Conclusion	155
Appendices	158
Appendix A: Background Information	158
Appendix B: Acculturation Index	160
Appendix C: Self-Construal Scale	163
Appendix D: Perceived Cultural Distance Scale	165
Appendix E: Language Self-Confidence Scale	166
Appendix F: Psychological Adjustment Scale	167
Appendix G: Social Difficulty Scale	168
Appendix H: Consent Form	169
References	172

LIST OF TABLES

Table 1: Comparison of Dimensions of Individualism (Independence) according to Triandis, Schwartz, Kagitçibasi, Oyserman, and Suizzo	30
Table 2: Comparison of Dimensions of Collectivism (Interdependence) according to Triandis, Schwartz, Kagitçibasi, Oyserman, and Suizzo	31
Table 3: Descriptive Statistics of Demographic Information	67
Table 4: An Overview of the Conceptually Developed Self-Construal Scale	70
Table 5: Part of the Result of Factor Analysis for the Whole Self-Construal Items (N = 177, Number of Items = 38): Eigenvalues, % of Variance Explained, Items, and Factor Loadings	75
Table 6: Factor Analysis for the Independent Self-Construal Sub-Scale (N = 177, Number of Items = 19), with Eigenvalue Larger than One	80
Table 7: Factor Analysis for the Interdependent Self-Construal Sub-Scale (N = 177, Number of Items = 19), with Eigenvalue Larger than One	81
Table 8: Three-Factor Solution for the Independent Self-Construal Sub-Scale	85
Table 9: Two-Factor Solution for the Interdependent Self-Construal Sub-Scale	86
Table 10: Means, Standard Deviations, Number of Items, and Internal Reliabilities of Each Scale	88
Table 11: T-Test Results for Mean Differences between the Mainland Chinese and Taiwanese Groups	89
Table 12: One-Way MANOVA: Mean, Standard Deviation, F value, and p-value of Marital Status for Psychological and Siocultural Adjustment	91
Table 13: One-Way MANOVA: Pairwise Comparisons among Marital Status for Psychological and Sociocultural Adjustment	92

Table 14: Correlations among All Variables (N = 177)	94
Table 15: Mainland Chinese Group: The Correlations between Acculturation Strategies and Cross-Cultural Adjustment	97
Table 16: Taiwanese Group: The Correlations between Acculturation Strategies and Cross-Cultural Adjustment	97
Table 17: One-Way MANOVA: Mean, Standard Deviation, F value, and p-value of Acculturation Strategy Types for Psychological and Siocultural Adjustment	100
Table 18: One-Way MANOVA: Pairwise Comparisons among Acculturation Strategy Types for Psychological and Sociocultural Adjustment	101
Table 19: One-Way MONCOVA: The Effects of Acculturation Strategy Types on Psychological and Sociocultural Adjustment, Controlling for Length of Residence and English Self-Confidence	102
Table 20: The Correlations between All Self-Construal Variables and Outcome Variables	104
Table 21: Mainland Chinese Group: The Correlations between Acculturation Strategies, Self-Construal Variables, and Outcome Variables	106
Table 22: Taiwanese Group: The Correlations between Acculturation Strategies, Self-Construal Variables, and Outcome Variables	107
Table 23: One-Way MANOVA: Mean, Standard Deviation, F value, and p-value of Self-Construal Types for Psychological and Sociocultural djustment	108
Table 24: The Effects of Independence and Interdependence (Sub-Scales) on Psychological Adjustment	110
Table 25: The Effects of Independence and Interdependence (Sub-Scales) on Sociocultural Adjustment	110
Table 26: Hierarchical Regression Analyses of Effects of Predictive Variables on Psychological Adjustment	115

Table 27: Hierarchical Regression Analyses of Effects of Predictive Variables on Sociocultural Adjustment	117
Table 28: Multiple Regression Analysis: Testing the Moderating Effect of Perceived Cultural Distance between Cultural Maintenance and Psychological Adjustment (Hypothesis 6a)	120
Table 29: Multiple Regression Analysis: Testing the Moderating Effect of Perceived Cultural Distance between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 6b)	121

LIST OF FIGURES

Figure 1: A Framework for Acculturation Research	17
Figure 2: Acculturation Strategies	20
Figure 3: Agency, Interpersonal Distance, and the Types of Selves	28
Figure 4: The Hypothetical Moderating Effect of Perceived Cultural Distance between Cultural Maintenance and Psychological Adjustment (<i>Hypothesis 6a</i>)	49
Figure 5: The Hypothetical Moderating Effect of Perceived Cultural Distance between Participation in the Host Society and Sociocultural Adjustment (<i>Hypothesis 6b</i>)	50
Figure 6: The Hypothetical Mediating Effect of Interdependent Self-Construal between Cultural Maintenance and Psychological Adjustment (<i>Hypothesis 7a</i>)	51
Figure 7: The Hypothetical Mediating Effect of Independent Self-Construal between Participation in the Host Society and Sociocultural Adjustment (<i>Hypothesis 7b</i>)	52
Figure 8: The Hypothetical Mediating Effect of English Self-Confidence between Participation in the Host Society and Sociocultural Adjustment (<i>Hypothesis 8a</i>)	54
Figure 9: The Hypothetical Mediating Effect of English Self-Confidence between Independent Self-Construal and Sociocultural Adjustment (<i>Hypothesis 8b</i>)	54
Figure 10: Scree Plot of Factors on the Whole Self-Construal Scale	77
Figure 11: Scree Plot of Factors on the Independent Self-Construal Scale	82
Figure 12: Scree Plot of Factors on the Interdependent Self-Construal Scale	82

Figure 13: Testing the Mediating Effect of Independent Self-Construal on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 7)	123
Figure 14: Testing the Mediating Effect of Uniqueness + Competition on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 7)	123
Figure 15: Testing the Mediating Effect of Direct Communication on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 7)	124
Figure 16: Testing the Mediating Effect of Autonomy on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 7)	124
Figure 17: Testing the Mediating Effect of English Self-Confidence on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 8a).....	126
Figure 18: Testing the Mediating Effect of English Self-Confidence on the Relation between Participation in the Host Society and Psychological Adjustment (Hypothesis 8a)	127
Figure 19: Testing the Mediating Effect of English Self-Confidence on the Relation between Independent Self-Construal and Sociocultural Adjustment (Hypothesis 8b)	128
Figure 20: Testing the Mediating Effect of English Self-Confidence on the Relation between Uniqueness + Competition and Sociocultural Adjustment (Hypothesis 8b)	129
Figure 21: Testing the Mediating Effect of English Self-Confidence on the Relation between Direct Communication and Sociocultural Adjustment (Hypothesis 8b)	129
Figure 22: Testing the Mediating Effect of English Self-Confidence on the Relation between Autonomy and Sociocultural Adjustment (Hypothesis 8b).....	130

CHAPTER 1

INTRODUCTION

To enrich their lives and pursue a higher education, many students from various parts of the world have chosen to relocate themselves to the industrialized countries of North America, Australia, and Europe (Yang, Noels, & Saumure, 2006). During the 2003-2004 academic year, more than 570,000 international students were studying in universities throughout the United States, accounting for about 4.3% of overall higher education enrollment (Institute of International Education, 2004). According to the statistical report from the International Office at The University of Texas at Austin (2006), 565,039 international students were studying in the U.S. during the 2004-2005 academic year. Meanwhile, among 22 selected research institutions in the U.S., international students accounted for about 11% of overall enrollment on average. States with the most international students included California, New York, Texas, Massachusetts, and Florida. The top 10 countries of origin of international students in the U.S. were India (80,466), China (62,523), Korea (53,358), Japan (42,215), Canada (28,140), Taiwan (25,914), Mexico (13,063), Turkey (12,474), Germany (8,640), and Thailand (8,637). In Fall 2005, 57 % of the international students in the United States were from Asia, 13% from Europe, 12.2 % from Latin America, 6.7 % from Africa, 5.6 % from Middle East, and 5.5 % from North America and Oceania.

These international students from various parts of the world experience different levels of difficulties in adapting to the host culture in many aspects, especially in their

initial years of relocation. Because international students living in the United States are very far away from their home countries, and because of various barriers arising from cultural differences, they may find it difficult or even frightening to establish a sense of belonging in a new cultural environment. For this reason, international students moving from one culture to another may experience unique stressors that natives could never even imagine (Cross, 1995; Sandhu & Asrabadi, 1998). Ward (1967) has invented the term “foreign student syndrome”, referring to the situation where a foreign student suffers from an exceptionally high level of anxiety-related problems but has no recognizable physical signs and symptoms. Zwingman (1978) has used another term “uprooting disorder” to describe foreign students’ emotional pain arising from their migration, such as alienation, loneliness, nostalgia, depression, a sense of helplessness, and other identifiable psychological symptoms. In addition to a variety of emotional issues, international students need to learn to deal with cultural shock and cultural differences in food, climate, language, communicative styles, values, customs, life pace, and so on.

Among all the international students enrolled in U.S. colleges or universities, Chinese international students, including those who come from Taiwan, mainland China, and Hong Kong, account for a fairly high percentage. In the 2003-2004 academic year, Chinese international students comprised 16.7% of the total international students enrollment in higher education (Institute of International Education, 2004). Chinese international students studying in the United States may encounter very unique acculturative stress because of different cultural norms and academic expectations between Chinese and American cultures. Traditionally, it is believed that American

culture exhibits more characteristics (e.g., autonomy, uniqueness, direct communication) which emphasize individualism, while Chinese culture reveals more characteristics (e.g., compliance, harmony) that belong to collectivism. Overall, Chinese international students are immersed in a cultural environment which places more emphasis on the virtues of humbleness, emotional restraint, self-effacement, and saving face (Ho, 1989; Kim, Atkinson, & Umemoto, 2001). It is likely that Chinese international students may encounter social difficulties fitting in the American style of social conversation, which features more direct expression of feelings, assertive expression of opinions, and direct communications (Wang & Mallinckrodt, 2006).

Studies on Chinese international students' life quality are significant as they draw attention to the cross-cultural adjustment of the growing population of Chinese international students in North America. More and more researchers have become interested in studying international students' cross-cultural adjustment and recommended that "adaptation" or "adjustment" be critically examined as an outcome of cross-cultural relocation, because the quality of adaptation may influence the psychological and sociocultural well-being of these sojourners (e.g., Ward & Kennedy, 1993b). Thus, understanding and exploring possible predictors of the quality of cross-cultural adjustment for Chinese international students are essential. Furthermore, the impact of Chinese international students can be global. After they complete their study, many of them may choose to stay in the host society and become immigrants or long-term residents, using their expertise to serve in the host society and provide a substantive source of human resources. For those who choose to go back to their own countries, their

cross-cultural experiences in North America for a few months or years in their lives may generate an enormous impact on their future lives through molding their thoughts, broadening their views, and directly influencing their families and careers. They can also use what they learn from another country to make contributions to their countries of origin. From a macro perspective, these sojourners' cross-cultural transitions can generate a global-wide impact. Therefore, it is worthwhile for researchers to pay more attention to Chinese international students' cross-cultural adjustments and their life well-being.

In accordance with the significance of studies on Chinese international students addressed above, I intend to investigate and explore possible factors that might affect international students' cross-cultural adjustment in the United States. I will investigate four factors in the current study: a) Acculturation strategies, including the degrees of original cultural maintenance and host cultural participation; b) Self-construals, which refer to self-views in relation to others; c) Perceived cultural distance, and d) English self-confidence. The outcome variable, cross-cultural adjustment, will be examined in two fundamental domains: psychological and sociocultural adjustment. Research questions and hypotheses were focused on how each factor affects the outcome variable, and how these factors interact with each other as they generate impacts on the outcome variable. More specifically, this study attempts to find answers to the following questions:

- a) What are the relations between each independent variable (i.e., acculturation strategies, self-construals, perceived cultural distance, and English self-confidence) and the outcome variable (i.e., cross-cultural adjustment, including psychological and socio-cultural domains)?

- b) Do different factors generate distinguishable influences on the psychological and socio-cultural domains of cross-cultural adjustment among Chinese international students?
- c) Does the relation between acculturation strategies and cross-cultural adjustment vary across the different levels of perceived cultural distance? (Does perceived cultural distance serve as a moderator in the relation between acculturation strategies and cross-cultural adjustment?)
- d) Do acculturation strategies influence cross-cultural adjustment through self-construals? (Do self-construals serve as a mediator in the relation between acculturation strategies and cross-cultural adjustment?)
- e) Do acculturation strategies influence cross-cultural adjustment through English self-confidence? (Does English self-confidence serve as a mediator in the relation between acculturation strategies and cross-cultural adjustment?)
- f) Do self-construals influence cross-cultural adjustment through English self-confidence? (Does English self-confidence serve as a mediator in the relation between self-construals and cross-cultural adjustment?)

CHAPTER 2

REVIEW OF LITERATURE

An Overview of International Students' Adjustment

Over the past decades, numerous students from all over the world have chosen to relocate themselves to different countries beyond their indigenous boundaries to pursue higher education and to broaden their horizons. Industrialized countries such as the United States, Canada, Australia, and many European countries are usually preferred by and attract students from various parts of the world. Earlier data from Zikopoulos (1993) revealed that more than 430,000 foreign students enrolled in U.S. colleges and universities in the 1992 to 1993 academic year. A few years later, Altbach (1997) reported that more than 453,000 foreign students enrolled in college level institutes of the United States, almost half of the world's total number of foreign students. The data showed a steady increase of 23.14% over five years from 1992 to 1997 (Sandhu & Asrabadi, 1998). According to the recent data from the Institute of International Education (2004), more than 570,000 international students studied in various universities throughout the United States during the 2003 to 2004 academic year, accounting for 4.3% of overall higher education enrollment. Again, the data revealed a sharp increase of the number of international students studying in the United States. Various factors (e.g., economic, cultural, political factors) indicate that the number of international students in the United States will increase continuously into the next century (Hayes & Lin, 1994; Pedersen, 1991). International students represent the role of

“cultural ambassadors” in a sense, because they provide opportunities for college administrators and faculty to contact and understand other cultures. The meaning of relocating themselves in a foreign country not only lies in achieving their personal goals, but also in enhancing international understanding and even in collaboration to deal with global issues such as hunger, AIDS, and drug abuse (Sandhu & Asrabadi, 1998).

Berry et al. (1987) defined *acculturative stress* as a special form of stress that manifests in physical, social, and psychological problems when people move across different cultures. Inevitably, people need to make a number of personal, social, cultural, and environmental changes, and adjust themselves to integrate into the new society. Many international students experience various sociocultural stresses such as cultural shock, cultural distance, language problems, differences in communication styles, as well as psychological problems such as a sense of loss, isolation, alienation, loneliness, nostalgia, helplessness, inferiority, anxiety, and depression. In addition, international students also need to adjust themselves in terms of the academic environment, because the education style (e.g., instructors’ expectation, class dynamics, class assignment formats) of the new country may be very different from that of their original country. Overall, those stress and problems are especially serious in the initial stage after their arrival. Foreign students may find it difficult and frightening to establish a sense of belonging in a new and strange society. What changes is not only the physical environment, but also the cultural contexts, the social values, priorities, and behaviors. People may feel it awkward, uncomfortable, difficult, and highly challenging to fit themselves into the new cultural environment. Due to these reasons, people moving from

one culture to another usually experience unique stressors that native people can never even imagine (Cross, 1995; Smart & Smart, 1995).

A great deal of studies has been conducted to investigate international students regarding their cross-cultural adjustment in various aspects. Researchers have examined a variety of factors which might influence and predict the quality of adjustment during cross-cultural transitions. For example, researchers have been interested in the impact resulting from personality variables such as extraversion, openness to new experience, locus of control (e.g., Ward & Kennedy, 1992; Yamaguchi & Wiseman, 2001); social and interpersonal variables such as social support, the quality of contact with host nationals (e.g., Hayes & Lin, 1994; Poyrazli et al., 2004); communication variables such language competence and confidence, communication styles (e.g., Oguri & Gudykunst, 2002; Redmond & Bunyi, 1993); and other personal variables such as coping strategies, acculturation strategies (e.g., Chataway & Berry, 1989; Cross, 1995; Ward & Kennedy, 1994).

Chinese International Students' Cross-Cultural Adjustment

Chinese international students, including those who come from Taiwan, mainland China, and Hong Kong, account for a fairly high percentage among all the international students enrolled in U.S. colleges or universities. In the 2003-2004 academic year, Chinese international students comprised 16.7% of the total international students enrollment in higher education (Institute of International Education, 2004). Over 95,000

students, or about 1 of every 140, enrolled in U.S. colleges or universities were international students from a country with a Chinese cultural heritage.

Chinese international students studying in the United States may encounter very unique and considerable acculturative stress because of different cultural norms and academic expectations between Chinese and American cultures. Traditionally, it is believed that American culture exhibits more characteristics (e.g., autonomy, uniqueness, direct communication) which emphasize individualism, while Chinese culture reveals more characteristics (e.g., compliance, harmony) that belong to collectivism. Overall, Chinese international students are immersed in a cultural environment which places more emphasis on the virtues of humbleness, emotional restraint, self-effacement, and saving face (Ho, 1989; Kim, Atkinson, & Umemoto, 2001). It is likely that Chinese international students may encounter social difficulties fitting in the American style of social conversation, which features more direct expression of feelings, assertive expression of opinions, and direct communications (Wang & Mallinckrodt, 2006).

In academic settings, Chinese international students may find that classroom atmosphere and expectations in an U.S. educational environment are different from those in their home countries (Yeh & Inose, 2003). International students from China or Taiwan are usually taught to be compliant and remain quiet in class; thus, they are not used to actively expressing their thoughts or asking questions until they are invited to do so by their teachers. Speaking up in class might be a big challenge and make them feel uneasy or pressured. When these Chinese and Taiwanese students study in the U.S., they have to be aware that they are expected by their American professors to take the initiative

in asking questions, expressing their opinions, and taking an active role in participating class discussion and intellectual conversation. They are anticipated to do so just like their American peers. In order to adapt themselves to the new Western academic norms, it is necessary for them to temporarily abandon their original Chinese academic norms which are considered proper in their home countries, and quickly find ways to adapt to American classroom atmosphere and style. However, it is normally found that Chinese international students tend to be quieter than their American classmates. It might be a result of their language limitation, especially in initial years of study, as well as different cultural expectations in academic settings.

Dimensions of Cross-Cultural Adjustment

Cross-cultural adjustment has been studied extensively. A number of individual, social, and environmental factors have been found to relate to a person's overseas adjustment. Ward and her colleagues developed a model of cross-cultural adjustment which conceptualizes adjustment in cross-cultural transition as a multifaceted construct. They claim that cross-cultural adjustment can be best examined from two conceptually distinct but empirically related dimensions: psychological (emotional/affective) and sociocultural (behavioral) adjustment (Searle & Ward, 1990; Ward & Kennedy, 1993a&b, 1999, 2001). The concept of adjustment in psychological dimension is derived from a theoretical framework on stress and coping, referring to the more subjective and internal aspect of psychological well-being, satisfaction, and comfort with the new culture. On the other hand, sociocultural adjustment is theoretically derived from social learning and

social cognition framework; it refers to the more objective and external aspect of cross-cultural adjustment and mainly involves an individual's efficacy in dealing with the challenges of the new environment and the tasks that he or she must complete in the new environment.

A series of studies examining the difference between psychological and sociocultural adjustment have supported Ward's multifaceted adjustment model, revealing that different factors appear to contribute differentially to the two aspects of adjustment (e.g., Searle & Ward, 1990; Hall et al., 2006). Studies have shown that psychological adjustment, as measured by global mood disturbance or by more specific measures of depression, is affected by personality factors, life events, social support, relations with host nationals, and coping styles (e.g., Searle & Ward, 1990; Ward & Kennedy, 1992, 2001; Noels & Clément, 1996; Ward, Leong, & Low, 2004). In one empirical study conducted by Searle and Ward (1990) in New Zealand, they found that extroversion, life events, and interpersonal relationship satisfaction in the host society predicted psychological adjustment in Malaysian and Singaporean students. In addition, Ward and Kennedy (1992) found that locus of control, interpersonal relationship satisfaction, social difficulty, and host national contact predicted psychological distress for New Zealand adults residing in Singapore. In a recent study examining British expatriates living in Singapore, Ward and Kennedy (2001) found that coping styles emerged as significant predictors of psychological adjustment. These findings are broadly consistent with the literature on stress of coping found in clinical psychology (e.g.,

Lazarus & Folkman, 1984) and more specific research on cross-cultural transition and psychological well-being (e.g., Chataway & Berry, 1989).

Studies examining sociocultural adjustment, as assessed by measures of social difficulty, have shown that sociocultural adjustment is generally predicted by cultural knowledge, cultural distance, language competency, length of residence in the host culture, social skills, and acculturation strategies (e.g., Ward & Searle, 1991; Ward & Kennedy, 1992, 1994; Noels, Pon, & Clément, 1996; Yang, Noels, & Saumure, 2006). Ward and her colleagues found that cultural identity and cultural knowledge were significant predictors of social difficulty in both a multinational sample of foreign students in New Zealand and a sample of New Zealand adults in Singapore; a strong cultural identity with the original culture were associated with increased social difficulty or poorer sociocultural adjustment in the host society. In addition, Ward and Kennedy (1994) examined the association between acculturation strategies (Berry, 1980, 1990) and sociocultural adaptation for a sample of sojourners in New Zealand, and found that respondents who endorsed a separatist position experienced the greatest amount of social difficulty, while subjects who endorsed assimilation and integration strategies experienced the least social difficulty.

Acculturation Strategies and Cross-Cultural Adjustment

Definition of Acculturation

The classical definition of acculturation was given by Redfield, Linton, and Herskovits (1936, p.149-152):

“Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either or both groups.....under this definition, acculturation is to be distinguished from culture change, of which it is but one aspect, and assimilation, which is at times a phase of acculturation.”

A few ideas are included in this definition: a) acculturation is viewed as one aspect of the broader concept of cultural change because it results from intercultural contact; b) acculturation is considered to generate change in either or both groups. Conceptually, acculturation is a neutral term, meaning that change can take place in either or both groups; practically, acculturation tends to bring more change in one of the groups (usually termed *acculturating group*) than in the other (Berry, 1990a, 1997); c) acculturation is distinguished from assimilation, which may at times be a phase of acculturation. The term *acculturation* can sometimes become synonymous with assimilation, but it is necessary to clarify and emphasize that assimilation is not the only type of acculturation.

In another statement given by the Social Science Research Council (1954, p. 974), acculturation was defined as:

“Culture change that is initiated by the conjunction of two or more autonomous cultural systems. Acculturative change may be the consequence of direct cultural transmission; it may be derived from non-cultural causes, such as ecological or demographic modification

induced by an impinging culture; it may be delayed, as with internal adjustment following upon the acceptance of alien traits or patterns; or it may be a reactive adaptation of traditional modes of life.”

In this definition, a few extra features about acculturation are added (Berry, 1997, 2003): a) acculturation can include changes that are not directly associated with culture; rather, the changes may come from other factors such as ecological or demographic aspects; b) the result of acculturation can be *creative*, which means it stimulates the generation of new cultural forms which are not found in either of the cultures in contact; c) the result of acculturation can be *delayed* and the changes appear a few years later; d) the result of acculturation can be reactive, which triggers resistance to change in both groups.

Two Levels of Acculturation: Cultural vs. Individual Level

Examining the effect of acculturation is essential both at a cultural level and an individual psychological level. Initially, the interest of acculturation arose from the concern that European colonialism intruded many regions and how their proliferation might impact indigenous peoples (Hallowell, 1945). Nowadays, globalization has resulted in a larger scale of economic and political changes in different countries and has caused new waves of immigrants and sojourners (Berry, 2003). In psychology, acculturation has been examined to investigate the experience of social and cultural change (e.g., education, telecommunications, or industrialization) which could interfere with psychological phenomena (e.g., beliefs, values, or cognitive abilities). (Berry,

Trimble, & Olmedo, 1986). Thus, acculturation has become an integral and important part in the field of cross-cultural psychology (Berry, 2003).

Graves (1967) has made a distinction between acculturation as a collective (group or cultural level) and as an individual (psychological) phenomenon. In the former, acculturation refers to a change in the culture of the group; in the latter, acculturation refers to a change in the psychology of the individual. Psychological acculturation indicates changes in an individual who is a participant in an intercultural context and is influenced by the external changing culture. The distinction between the two levels is necessary for two reasons: the first is to examine the systematic relations between these two sets of variables (i.e., culture vs. individual), and the second is to examine the individual differences during the process of acculturation, as not all individuals participate to the same extent in the general acculturation being experienced by their group.

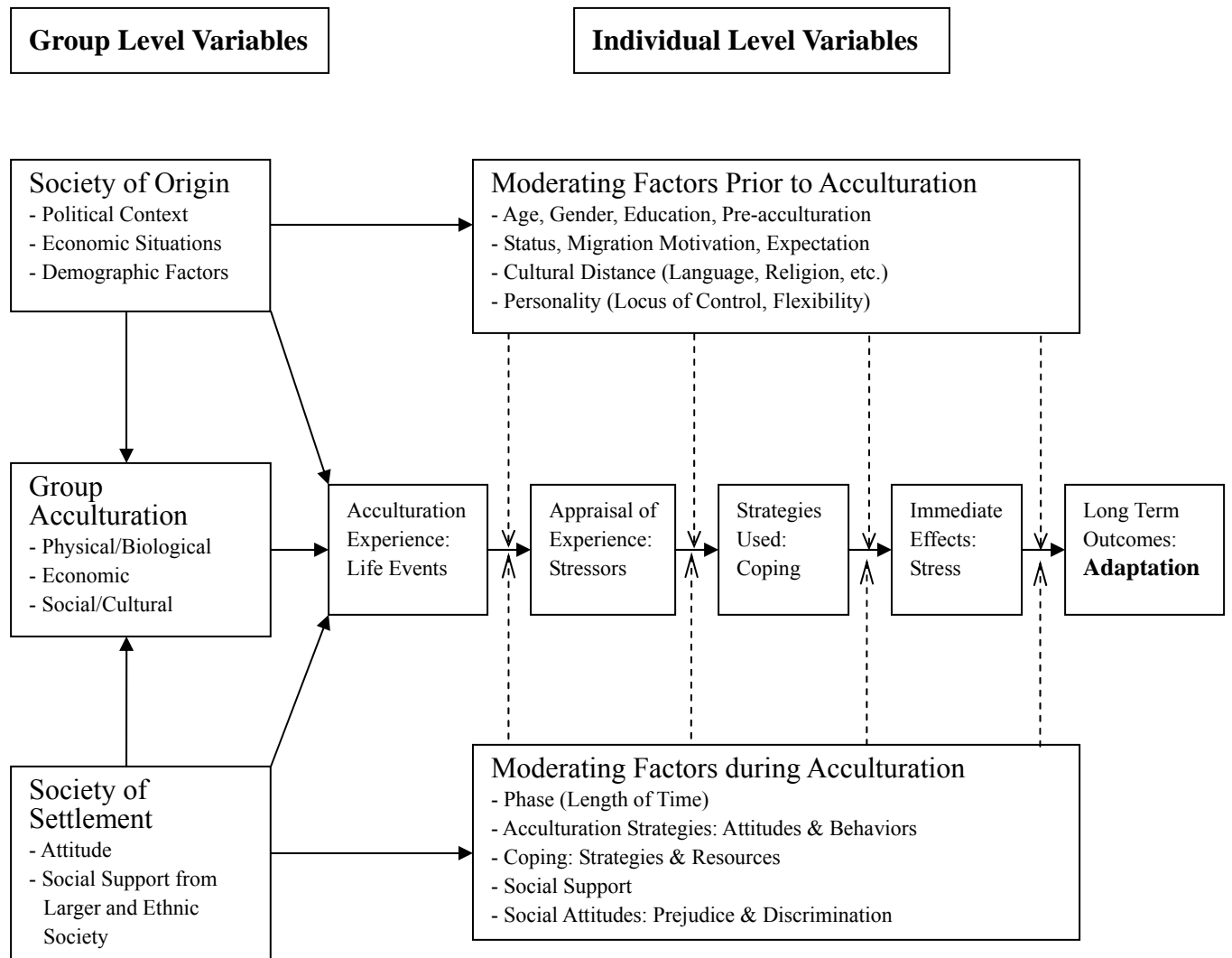
Acculturation Framework

Berry (1992, 1997) presented a framework which outlines and links cultural-level and individual-level acculturation (see Figure 1). The left part of the figure signifies the group- or cultural-level phenomena and primarily consists of situational variables, while the right part represents the individual- or psychological-level phenomena and is mainly composed of personal variables. The upper level of the figure represents features which exist prior to the happenings of acculturation, while the bottom level represents those occur during the process of acculturation. The middle of the framework, from the left to

the right, represents the process of acculturation from the group level to the individual/psychological level. The contact between two cultures brings changes in their collective features (e.g., political, economic, social structures), which in turn impacts the individuals who are involved in the acculturative process. This results in a number of possible psychological and behavioral transformations, and eventually leads to a person's adaptation.

Figure 1

A Framework for Acculturation Research (Berry, 1997, p.15)



There are some possible moderating variables included in this framework which are located in the upper and lower parts of the model, featuring the factors prior to acculturation (e.g., gender, age, cultural distance, personality) and during acculturation (e.g., length of time, acculturation strategies, coping strategies, social support). The moderating influences are shown by the dotted lines in Figure 1. This model includes both moderating and mediating variables (Baron & Kenny, 1986), and some variables may serve as both. For instance, coping strategies can serve as a mediator (when they link the relation between stressors and stress reaction) as well as a moderator (when they affect the magnitude of relation between stressors and stress) (Frese, 1986).

Acculturation Strategies

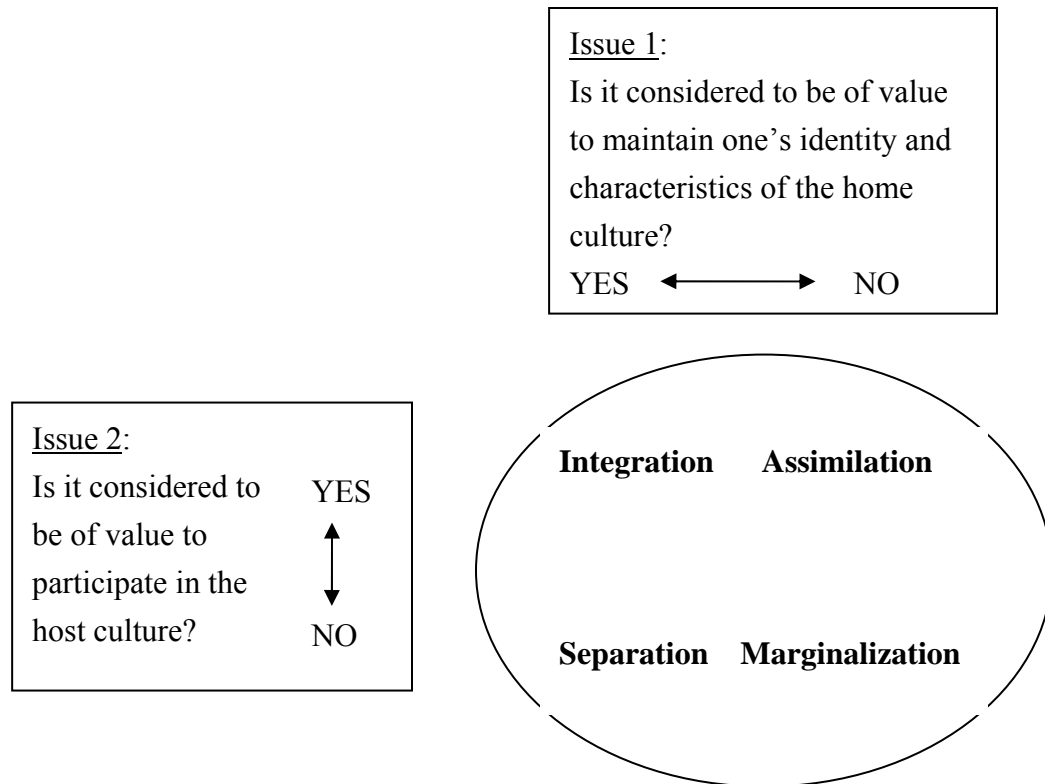
According to Berry (1980, 1990), there are two major issues which should be taken into considerations when dealing with topics with respect to acculturation strategies. These two critical issues are: a) maintenance of heritage culture and identity – to what degree are cultural identity and characteristics considered to be important; b) contact and participation in the host society – to what extent should they be involved in other cultural groups, or primarily remain among themselves. Even though these two questions can be responded to on a continuous scale from negative to positive, they can conceptually be treated as dichotomous yes/no options (Doná & Berry, 1994).

Based on these two underlying issues, a conceptual framework is created, revealing four types of acculturation strategies (see Figure 2): a) *Integration*: when individuals endorse “yes” on both issues, which means that, on the one hand, they want to maintain

regular contact with people from their original cultural background, and on the other hand they are also willing to seek participation in the host culture; b) *Assimilation*: when individuals endorse that they have interest in participating in the activities of the host society and in interacting with people from the host society, while avoiding to maintain a regular contact with the people and heritage from their original culture; c) *Separation*: individuals who keep an intimate interaction with people from their original culture and spend most of their time engaging in activities in a context of their own cultural background, but have limited contact with the host society; d) *Marginalization*: people have little possibility or interest in maintenance of heritage culture (often because of enforced cultural loss), and have little interest in having relations with the host society (often because of exclusion or discrimination).

Figure 2

Acculturation Strategies (Berry, 1997, p.10)



Acculturation Strategies and Adjustment: Empirical Suggestions

Empirical evidence tends to endorse that the Integration approach is the most preferred acculturation strategy among immigrants, while the Marginalization approach is the least preferred one (e.g., Berry, 1997; Sam, 1995). The Integration approach is found

to be associated with the lowest level of acculturative stress (Berry, 1990), which means that it is the most adaptive approach. However, when different dimensions of cross-cultural adjustment (i.e., psychological and sociocultural adjustment) are taken into consideration, researchers found that different acculturation strategies are associated with different dimensions of adjustment. For example, Ward and Kennedy (1994) studied 98 employees working for a large international organization in New Zealand while they were on various overseas assignments, and found that those who strongly identified with co-nationals (i.e., people from their original culture) experienced less depression, while those who strongly identified with host nationals experienced less social difficulties in the new cultural context. They further used interaction terms to examine the effects of the four acculturation strategies and found that the Integration strategy appeared to be the most effective for psychological adjustment, while the Separation approach was associated with the highest level of sociocultural difficulty. Doná and Berry (1994) studied 101 Central American refugees living in Toronto, Canada and found that subjects who adopted an Integration approach exhibited less psychological stress than those who chose other approaches. In another recent study conducted by Kosic et al. (2006), they investigated 162 Polish immigrants residing in Rome, Italy, and again they found that the Integration strategy was strongly associated with psychological adaptation. Interestingly, they also found that, among the four approaches, the Assimilation approach was the highest associated with sociocultural adaptation. Nonetheless, in a study conducted by Neto et al. (2005), they studied 118 Portuguese immigrants living in Bonn, Germany, and

the results revealed that the Integration approach was the most effective strategy with regard to sociocultural adaptation, but not with psychological adaptation.

Self-Construals and Cross-Cultural Adjustment

Basic Concepts of Self-Construals: Independence vs. Interdependence

The basic concept of self-construals was originally proposed by Markus and Kitayama (1991), referring to the degree to which people view themselves as separated from (i.e., Independence) or connected with (i.e., Interdependence) others. With respect to *Independent* self-construal, the self is viewed as a whole, unique, and autonomous entity that is distinct from others, rather than as a part of social contexts and relationships. Even in consideration of in-group members or significant others, there exists a boundary between the unique self and other entities. Similar labels of independent self-construal include individualist, egocentric, separate, autonomous, idiocentric, and self-contained. On the other hand, *Interdependent* self-construal views the self as part of an encompassing social relationship. Individuals are not separate from the social context; rather, they are more connected and less differentiated from others. People are expected to fit in with relevant others, to fulfill obligation, and to become a part of various interpersonal relationships. What is important in an interdependent self is not the inner self but the relationships of the person to other actors (Hamaguchi, 1985). Personal opinions, achievements, and characteristics are usually put in second place in social contexts. The boundary between the self and others are not so apparent; it is very common that individuals incorporate significant others into the selves. Similar notions of

interdependence include sociocentric, holistic, collective, allocentric, connected, and relational (Markus & Kitayama, 1991).

Dimensions of Independence and Interdependence

The original idea of independent and interdependent self-construals proposed by Markus and Kitayama (1991) is a remarkable contribution to knowledge and research body in the field of cross-cultural psychology. Numerous studies have been constructed based on their conceptual model. For example, a great deal of researchers have been interested in the role of independent and interdependent self-construals in international students' cross-cultural adaptation (e.g., Cross, 1995; Oguri & Gudykunst, 2002; Yang et al., 2006). In general, it is predicted that Asian students who hold stronger independent self have better adaptation when they study in individualist countries such as the United States. However, there are many sub-dimensions encompassed in the notion of both Independence and Interdependence and were not clearly addressed firsthand. Simply connecting independent self with individualist culture or simply connecting interdependent self with collectivist culture might be too simplified and problematic. Such dichotomous association could not explain the widely inconsistent study results and has provoked arguments from many scholars (e.g., Kagitçibasi, 1994; Matsumoto, 1999; Oyserman et al., 2002) and thus resulted in efforts to enrich the possible sub-dimensions of Independence and Interdependence (e.g., Kagitçibasi 1996, 2005; Schwartz, 1994; Suizzo, 2007).

In the following section, I will give an overview and compare different sub-dimensions of Independence and Interdependence provided by various scholars: Triandis (1990, 1995), Schwartz (1990, 1994), Kagitçibasi (1996, 2005), Oyserman et al. (2002), and Suizzo (2007). Before entering this section, it is necessary to note another set of related but distinctive concept: Individualism/Collectivism (I/C) (Hofstede, 1980; Triandis, 1990, 1996, 2001; Triandis & Gelfand, 1998). The basic distinction between I/C and self-construals is that the former (I/C) is a cultural-level variable, while the latter (Independence/Interdependence) is an individual-level variable. Independence/Interdependence (or some scholars use another term “idiocentrism/allocentrism”) is a “psychological counterpart” of I/C (Schwartz, 1990). Generally, individualist culture tends to promote independence, autonomy, self-reliance, while collectivist culture reflects a preference for interdependence, conformity to group norms, and relatedness to others (Greenfield, 1994; Hofstede, 1980). Accordingly, individuals’ self-views in relation to others (i.e., self-construals) can be shaped by the cultural environment to which they belong. Because of the close connection between the two constructs of I/C and self-construals, it is helpful to refer to the dimensions of I/C when specifying the dimensions of Independence/Interdependence. As a matter of fact, many studies and measurements of I/C were performed at the individual level of analysis rather than cultural level (e.g., Hui, 1984, 1988; Triandis & Gelfand, 1998).

Triandis (1990, 1995) argued that there are many kinds of individualism and collectivism. For example, American individualism is different from Swedish individualism; likewise, Korean collectivism is not the same as the collectivism of the

Israeli kibbutz (Triandis & Gelfand, 1998). One dimension that is especially important to distinguish among different styles of individualism and collectivism is the relative emphasis on horizontal and vertical social relationships. Horizontal social relationship means an emphasis on equality (e.g., Australia, Sweden, Israeli kibbutz) and assumes that one self is more or less like every other self in terms of status, while vertical social relationship puts an emphasis on hierarchy (e.g., Korea, China, the U.S.) and assumes that one self is different from other selves with reference to status. Accordingly, four different types of cultures (or say four different types of selves shaped by these cultures) are identified: a) Horizontal Individualists (HI), where people want to be unique and distinct from groups; they are likely to say “I want to do my own thing” and are highly self-reliant, but they are not necessarily interested in having high status; b) Vertical Individualists (VI), where people compete with others in order to gain high status; they are likely to say “I want to be the best”; (c) Horizontal Collectivists (HC), where people merge their selves with their in-groups, emphasize interdependence and sociability, but they do not submit easily to authority; d) Vertical Collectivists (VC), where people submit to the authorities of the in-group and are willing to sacrifice themselves for their in-group. Triandis (1995) also argued that there are many dimensions defining different varieties of individualism and collectivism in addition to the horizontal-vertical dimension.

In his previous work (Triandis et al., 1985, 1986, 1988), Triandis suggested that the content of Individualism consists of four factors: *Self-Reliance* (e.g., “I usually struggle through a personal problem by myself”), *Competition* (e.g., “I always do my best when I

compete with others”), *Emotional Distance from In-Groups* (e.g., “The parents of those who did win an award have no right to feel that they themselves have earned it”), and *Hedonism* (e.g., “It is important for me to enjoy my life”). The content of Collectivism consists of three factors: *Interdependence* (e.g., “Before making a decision, I like to consult with many others”), *Family Integrity* (e.g., “I want my aging parents to live with me in my home”), and *Sociability* (e.g., “I like to share little things with my neighbors”). He also suggested that HI is related to self-reliance; HC is related to interdependence; VC is related to family integrity; and VI is related to competition and hedonism.

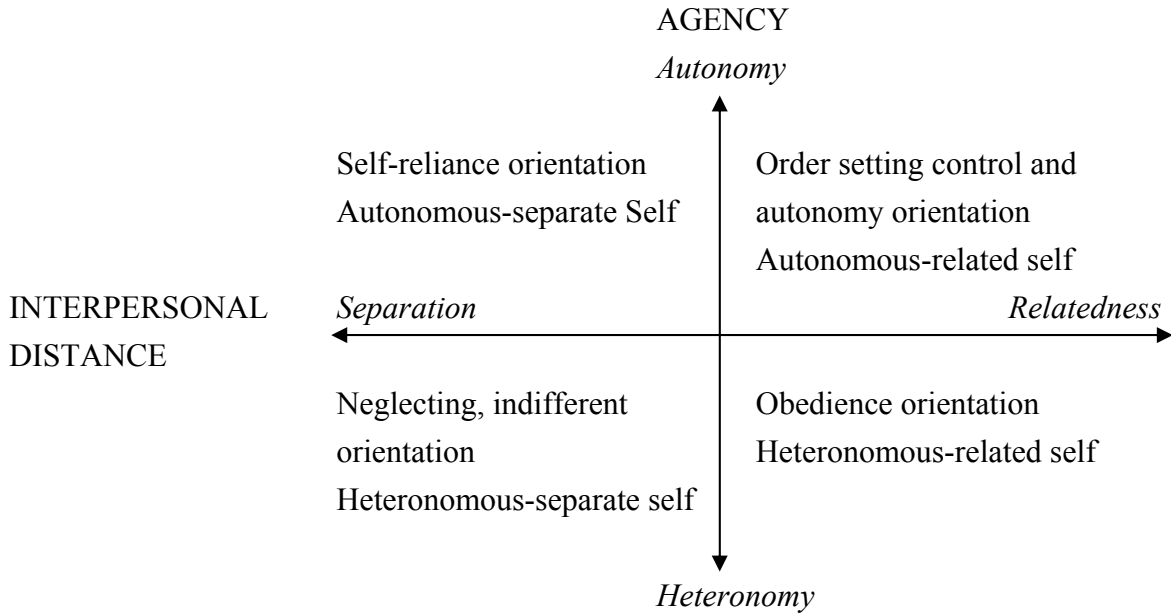
Schwartz (1994) reconceptualized the dimensions of Individualism and Collectivism and proposed ten motivational value types. According to Schwartz, dimensions of Individualism include *openness to change* (including two motivational values: *self-direction* and *stimulation*) and *self-enhancement* (including three values: *hedonism*, *power*, *achievement*), as their values primarily serve the interests of the individual; whereas Collectivism features *conservation* (including three values: *conformity*, *tradition*, and *security*) and *self-transcendence* (including two values: *universalism* and *benevolence*), because these values primarily serve the interests of others.

Kagitçibasi (1996, 2005) has argued that the definitions of Independence and Interdependence have confounded two distinct dimensions: *agency* (autonomy-heteronomy) and *interpersonal distance* (relatedness-separateness). *Agency* refers to the degree of autonomous functioning, extending from autonomy to heteronomy. Autonomy is the state of being able to govern oneself, while heteronomy is the state of

being governed from outside and usually has to do with being obedient to authority. *Interpersonal distance* reflects the degree of connecting with others in terms of self-other relations and extends from separateness to relatedness. Separateness means that the boundaries between the self and others are distinct, while relatedness tends to blur the self-other boundaries. Previous researchers have claimed that Independence and Interdependence are not opposite poles on a single dimension and can actually coexist in individuals (Kagitçibasi, 1994, 1996; Singelis, 1994). However, previous research did not solve the problem of confounded dimensions. To solve the problem, Kagitçibasi (1996, 2005) proposed a fourfold family model and self model (see Figure 3) based on the two dimensions (i.e., agency and interpersonal distance) and created four types of self views in relation to others: a) autonomous-related self; b) autonomous-separate self; c) heteronomous-related self, and d) heteronomous-separate self. Kagitçibasi stated that both autonomy and relatedness are universal human needs, thus autonomous-related self is a candidate for a healthy universal (Kagitçibasi, 1996, 2005).

Figure 3

Agency, Interpersonal Distance, and the Types of Selves. (Kagitçibasi, 2005, p.412)



In addition, Oyserman and her colleagues (2002) also proposed a multidimensional framework to facilitate the assessment of I/C construct. They meta-analyzed 170 studies assessing I/C construct from 1980-1999, with studies assessing self-construals included as well, and finally identified seven domains (i.e., *Independence, Goals, Compete, Unique, Private, Self-know, and Direct communicate*) for Individualism and eight domains (i.e., *Related, Belong, Duty, Harmony, Advice, Context, Hierarchy, and Group*) for Collectivism. Recently, through conducting factor analyses for her Goals and Values in Adulthood Questionnaire (GVAQ), which was administered to a sample of 361 parents of children between one day and 6 years old, Suizzo (2007) labeled dimensions of

Independence as *agency, self-direction, power, and achievement*, while dimensions of Interdependence as *tradition & conformity, benevolence & prosocial, and relatedness*.

Table 1 and Table 2 present a comparison of dimensions of Individualism and Collectivism (or their psychological counterpart: Independence and Interdependence) according to the five scholars mentioned above. By taking all these multiple dimensions into consideration, I hope to reconstruct a framework suitable for studies on sojourners' cross-cultural transitions.

Table 1

Comparison of Dimensions of Individualism (Independence) according to Triandis, Schwartz, Kagitçibasi, Oyserman, and Suizzo

Dimensions of Individualism (Independence)	Triandis (1985)	Schwartz (1994)	Kagitçibasi (1996, 2005)	Oyserman et al. (2002)	Suizzo (2007)
Self-Reliance	✓			✓ (Independence)	
Competition	✓			✓	
Emotional Distance from Ingroups	✓				
Hedonism	✓	✓			
Self-Direction		✓	✓ (Agency)	✓ (Independence)	✓
Stimulation		✓			
Power	✓ (Vertical Individualism)	✓			✓
Achievement		✓		✓ (Goals)	✓
Autonomy (Agency)		✓ (Self-Direction)	✓	✓	✓
Interpersonal Distance (Separateness)			✓		
Goals				✓	
Uniqueness	✓ (Horizontal Individualism)			✓	
Privacy				✓	
Self-know				✓	
Direct Communication				✓	

Note: Descriptions in the parentheses indicate the term used by the scholar or the similar concept included in the framework with reference to a certain dimension

Table 2

Comparison of Dimensions of Collectivism (Interdependence) according to Triandis, Schwartz, Kagitçibasi, Oyserman, and Suizzo

Dimensions of Collectivism (Interdependence)	Triandis (1985)	Schwartz (1994)	Kagitçibasi (1996, 2005)	Oyserman et al. (2002)	Suizzo (2007)
Advice	✓			✓	
	(Independence)				
Family Integrity	✓				
Sociability	✓		✓ (Relatedness)	✓ (Relatedness)	✓
					(Prosocial)
Conformity		✓	✓	✓	✓
			(Heteronomy)	(Hierarchy)	
Tradition		✓			✓
Security		✓			
Universalism		✓			
Benevolence		✓			✓
Heteronomy			✓		
Relatedness			✓	✓	✓
Belonging				✓	
Duty				✓	
Harmony		✓		✓	
		(Security)			
Context				✓	
Hierarchy	✓ (Vertical Collectivism)			✓	
Group				✓	

Note: Descriptions in the parentheses indicate the term used by the scholar or the similar concept included in the framework with reference to a certain dimension.

Self-Construals and Cross-Cultural Adjustment: Empirical Evidence

There have been numerous studies investigating the association between self-construals and sojourners' cross-cultural adjustment. For instance, Cross (1955) compared a sample of Asian international students and American students in Hawaii and found that Asian international students who emphasized independent self-construal preferred to use direct coping strategies, which are more prototypical of the American culture. As a result, they experienced less stress than those who highlighted interdependence self-construal. In another study conducted by Yamaguchi and Wiseman (2001), they investigated a sample of Japanese international students studying in the United States and found similar results: those who had stronger independent self-construal were able to deal with difficult situations better than those who held a stronger interdependent self-construal; thus, they were able to adjust themselves well and maintained the psychological health. They also found that independent self-construal was positively related to increased level of contact with people in the host society and perceived intercultural communication effectiveness, which implies a better sociocultural adjustment for international students with a stronger independent self-construal. Oguri and Gudykunst (2002) studied a sample of Asian international students (from Japan, South Korea, China, Taiwan, and Hong Kong) studied in the United States, and again they found that independent self-construal predicted psychological adjustment, while interdependent self-construal was not related to psychological adjustment. The rationale for the result was that independent self-construal represents the prototypical type of self in American culture. In a recent study conducted by Yang, Noels, and Saumure (2006),

they investigated a sample of international students in Canada and again it was supported that independent self-construal predicted psychological adjustment.

In general, previous empirical studies suggest that independent self-construal could facilitate international students' psychological adjustment while they studied in the western culture, while interdependent self-construal was not predictive of their cross-cultural adjustment. Independent self-construal was viewed as a typical type of self in western individualist culture, and it seems reasonable to claim that people who hold a stronger independent view of the self are able to fit themselves well into the host western society. However, all of the studies mentioned above tend to take a dichotomous view of the self and did not investigate a variety of sub-dimensions under the broad notions of Independence and Interdependence. For example, it was generally found that interdependent self-construal was not predictive of psychological adjustment for international students studying in the western society. But if we further investigate the sub-dimensions of interdependence (e.g., relatedness, sociability), it is possible to find some of them will predict psychological well-being. For example, Ward and Kennedy (1993) found that social support variables (e.g., the quality and quantity of interpersonal relations with host nationals) predict psychological adjustment during cross-cultural transitions. In fact, independent and interdependent self-views in relation to others can and do coexist in individuals; both theoretical and empirical evidence have supported the coexistence of the two self-views (Singelis, 1994). The coexistence of the two well-developed self-construals are not necessarily problematic or contradictory; rather, possessing both self-views implies holding a flexible self, which can be quite useful and

salutary when individuals move between different cultures and encounter cultural adaptation (Cross & Markus, 1991). Kagitçibasi also claimed that both autonomy (a dimension of Independence) and relatedness (a dimension of Interdependence) are universal human needs, thus autonomous-related self is a candidate for a healthy universal (Kagitçibasi, 2005), which suggests that individuals with autonomous-related selves may adapt themselves the best in a new cultural environment.

Cultural Distance and Cross-Cultural Adjustment

Cultural distance refers to the differences or similarities between two cultures in terms of their physical (e.g., climate) and social (e.g., language, education, religion, family, etc.) characteristics (Babiker et al., 1980). It has been suggested that, for people who live abroad, some countries maybe harder to adjust to than others when it comes to “cultural distance” (Hofstede, 1980), “cultural barriers” (Torbiorn, 1982), “culture toughness” (Mendenhall & Oddou, 1985), or “culture novelty” (Black et al., 1991). To date, a number of researchers have been interested in examining the relation between cultural distance and overseas students’ cross-cultural adjustment (e.g., Babiker et al., 1980; Ward & Kennedy, 1993b). Cultural distance or the perceived cultural distance between the original and host culture has been viewed as a crucial factor in acculturation orientations and outcomes (Berry, 1992; Searle & Ward, 1990). Babiker et al. (1980) have postulated that cultural distance and related handicaps (e.g., communication barriers) underlie the stress which causes psychological symptoms (e.g., anxiety, frustration, depression) and social failures for overseas students. They suggested that those

psychological symptoms and social or academic failures may be a function of the distance between the two cultures and the degree of alienation. To test their hypothesis, they developed an instrument to measure and quantify cultural distance based on their social and physical attributes, and they found that anxiety during the Easter term and the numbers of medical consultations during the year were significantly related to cultural distance for overseas students at Edinburgh University. Using the instrument developed by Babiker et al., Ward and Kennedy (1993b) also found that cultural distance predicted sociocultural adjustment for Malaysian and Singaporean students in New Zealand.

Cultural Distance and Adjustment: More Empirical Suggestions

A variety of empirical studies have suggested that larger perceived cultural distance can undermine sojourners' cross-cultural adjustment. For example, Redmond and Bunyi (1993) examined a large sample of international students enrolled in a midwestern university in the United States and concluded that a higher degree of cultural distance was associated with higher difficulty in social integration (i.e., the ability to initiate interactions and maintain interpersonal relations with host nationals). They found that it was easier for British, European, and South American students to be integrated into the U.S. society than students from North Korea, Taiwan, and Southeast Asia. This is presumably because of the larger perceived cultural distance of the latter groups. Yeh and Inose (2003) conducted their study in a northern university in the U.S. and also found that international students from Europe experienced less acculturative stress than their counterparts from Asia, Central/Latin America, and Africa.

In another study conducted in Australia by Nesdale and Mak (2003), they included a large sample of immigrants from Hong Kong, Vietnam, Bosnia, Sri Lanka, and New Zealand and found that cultural distance was one of the main predictors of ethnic identification (i.e., immigrants' identification with their culture of origin) and host culture identification. Their results demonstrated that New Zealanders, who considered themselves to be culturally most similar to the Australian host nationals, had experienced higher levels of acceptance by Australians and lower levels of involvement in the original ethnic groups compared with the groups that considered themselves to be culturally more dissimilar from the host Australians. Their study suggested that cultural distance can influence immigrants' cross-cultural adjustment through identification with the original or the host cultures.

In addition, Waxin (2004) investigated a sample of expatriated managers (from France, Germany, Korea, and Scandinavia) in India and found that culture of origin had a direct impact on expatriates' cross-cultural adjustment in terms of social interaction. A larger perceived cultural distance was associated with less interaction adjustment. Waxin also found that culture of origin could moderate the relation between antecedent variables (e.g., organizational, individual, and contextual factors) and expatriates' social interaction adjustment. Consistent with Waxin's study, Stahl and Caligiuri (2005) also confirmed the moderating role of cultural distance on expatriates' cross-cultural adjustment. They examined two samples of expatriated professionals from Germany through conducting semi-structured interview while participants were having international assignments in Japan and in the U.S., and demonstrated that contextual factors, such as cultural distance

and position level, could moderate the relation between coping strategies and cross-cultural adjustment. The higher cultural distance sample (the sample in Japan) revealed a stronger relation between problem-focused coping strategy and cross-cultural work adjustment than the lower cultural distance sample (the sample in the U.S.). Finally, in a recent study conducted by Galchenko and Vijver (2007) in Russia, they investigated a variety sample of exchange students from East Asia (e.g., China and North Korea), Africa (e.g., Nigeria, Zambia, Kenya, Tanzania, Zimbabwe, and Cameroon), and Soviet Union (e.g., Armenia and Georgia) and found that a larger perceived cultural distance between the original and the host cultures was associated with less psychological and sociocultural adaption.

Another related concept of cultural distance is “cultural-fit”, which means the degree of fitness between an individual’s internalized cultural framework (e.g., personality, affect, cognition, behavior) and cultural norms or characteristics of the society in which one resides (See Searle & Ward, 1990). Researchers have suggested that perceived cultural distance may be a better predictor than “cultural-fit” for international students (Yang et al., 2006). If individuals do not subjectively perceive the difference between self characteristics and the cultural characteristics of the host society, the issue of cultural-fit may have little influence on their cross-cultural adjustment. In fact, cultural distance and culture-fit are two related but distinctive concepts; the former refers to the degree of similarities and dissimilarities between two cultures, while the latter means the degree of fitness between an individual and a culture. Higher cultural distance between two cultures may imply lower cultural-fit between the individual and the new host society.

However, hypotheses related to the role of cultural-fit on cross-cultural adjustment were not supported in general (Yang et al., 2006), while a great deal of empirical studies have shown that cultural distance or perceived cultural distance had a direct impact on sojourners or immigrants' cross-cultural adjustment. It has also been revealed that cultural distance could play a moderating role in cross-cultural adjustment (e.g., Waxin, 2004; Stahl & Caligiuri, 2005).

Language Self-Confidence and Cross-Cultural Adjustment

Confidence in using the language of the host society is believed to be another significant predictor during the process of cross-cultural adjustment for international students. Language confidence is defined as “self-perceptions of communicative competence and concomitant low levels of anxiety in using the second language, leads to increased usage of, and communicative competence in, the second language” (Noels, Pon, & Clément, 1996, p.248). Cognitive (e.g., the knowledge and ability), emotional (e.g., the confidence and anxiety), and motivational (e.g., the preference) factors related to second language learning and usage can influence one's psychological as well as sociocultural adjustment during the process of cross-cultural transitions. Language confidence, which underlines a high level of subjectively perceived competence and combined with a low level of anxiety in using that language, is argued to be a more vital predictor of acculturative outcomes than actual linguistic competence (Noels & Clément, 1996). High self-confidence and comfort in using the second language relates to a lower sense of stress (psychological aspect) and a higher sense of personal control in carrying out daily

tasks and academic requirement (sociocultural aspect) for international students. Psychological and sociocultural aspects of adjustment can be associated with each other. When one is able to successfully accomplish daily or academic tasks, he or she will experience less depression and be able to have a greater level of psychological satisfaction. Therefore, one's language confidence can directly influence the sociocultural aspect of adjustment, and in turn affect one's psychological adjustment.

Language Self-Confidence and Adjustment: Empirical Evidence

Previous researchers have claimed that effective intercultural communication can facilitate a sense of well-being in cross-cultural adjustment. Numerous studies have consistently confirmed the association between English language skills and academic performance, general adjustment level, and social interactions with host cultural members (e.g., Duru & Poyrazli, 2007; Hayes & Lin, 1994; Noels, Pon, & Clément, 1996; Poyrazli et al., 2004; Yang et al., 2006; Yeh & Inose, 2003; Wang & Mallinckrodt, 2006). For instance, Duru & Poyrazli (2007) investigated a sample of 229 Turkish international students studying in various universities throughout the United States and found that their self-reported English competency was a significant predictor of acculturative stress. Consistently, Yeh and Inose (2003) examined a sample of 359 international students studying in the U.S. and again confirmed the significant predictive role of English fluency in international students' acculturative stress.

Previous researchers also found that confidence in using the second language can mediate the relation between intercultural contact and cross-cultural adaptation. In a study conducted by Noels, Pon, and Clément (1996) through examining 179 Chinese

international students studying in Canada, the results supported their proposed model in which communication variables served as a mediator in influencing the relation between international students' interethnic contact and cross-cultural adjustment. Communication variables are found to be important for psychological adaptation to interethnic contact; lower levels of contact with the Canadian culture and linguistic confidence in English lead to less ability to meet daily needs, thereby interpreting adjustment difficulties in an unfamiliar society. People with lower communicative competence and confidence may feel isolated and upset because of a sense of malfunctioning and inferiority in the host society. In another recent study conducted by Yang et al. (2006) in Canada, they again confirmed that the link between intercultural contact and cross-cultural adjustment was mediated by language self-confidence; frequencies and qualities of contact with the host nationals could influence both psychological and socio-cultural adjustment through English self-confidence. In addition, Dao, Lee, & Chang (2007) investigated a sample of 121 Taiwanese students studying in a southern university in the States and found that perceived English fluency can mediate the relation between acculturation level and the degree of depression.

Self-Construals and Language Self-Confidence

Empirical studies have shown that self-construals are associated with an individual's confidence in using a second language. Yamaguchi & Wiseman (2001) found that Japanese international students in the United States who held an independent view of the self experienced a better sense of communicative effectiveness when interacting with people from the host society. In addition, Oguri and Gudykunst (2002) found that Asian

international students who used to take open, direct, and prototypical styles of communication generally had better sociocultural adjustment while studying in the United States, for it was believed that such communicative style could match the host society. Their findings suggest various aspects of communication (e.g., self-confidence, skills, or styles) are important in influencing the quality of adjustment during cross-cultural transitions.

CHAPTER 3

PROPOSED RESEARCH STUDY

This chapter presents a description of the main research questions and hypotheses, the methods, and the data analysis plans for the proposed research study.

Research Questions and Hypotheses

Research Question 1

What is the relation between acculturation strategies (which has two dimensions: *cultural maintenance* and *participation in the host society*) and the cross-cultural adjustment (which has two dimensions: *psychological adjustment* and *sociocultural adjustment*) among Chinese international students?

Hypothesis 1a: It is predicted that the maintenance of one's original cultural identity is positively related to psychological adjustment, while the degree of participation in the host society is positively associated with sociocultural adjustment.

Hypothesis 1b: Participants who adopt Integration strategy (those who score highly on both cultural maintenance and participation in the host society) will score highly on psychological adjustment, followed by those who adopt Separation, Assimilation, and Marginalization strategies, respectively.

Rationale: The first research question is designed to test the relation between acculturation strategies (Berry, 1980, 1997) and cross-cultural adjustment (Ward, 1993 a & b) among Chinese international students. According to Berry's theoretical model, the

two basic issues of acculturation strategies are maintenance of home cultural identity and participation in the host society. It is expected that the first issue (home culture maintenance) primarily has to do with one's psychological adjustment, while the second issue (participation in the host society) is directly related to one's sociocultural adjustment. Based on the two basic issues, four types of acculturation strategies are generated. Overall, previous empirical studies have confirmed that Integration approach (i.e., considering that both issues are of value) is the most preferred and the most adapted strategy (both psychologically and socioculturally) for immigrants and sojourners, and Marginalization approach (i.e., considering neither issues are of value) is generally considered the least adapted strategy (both psychologically and socioculturally).

It is further predicted that, when it comes to one's psychological adjustment, Separation approach (i.e., maintaining the relationship with the home culture but isolating oneself from the host culture) is better than Assimilation approach (i.e., participating in the host culture but keeping a distance with people from the home culture). This is because people from the home culture have similar experience living in the host society; they can communicate with their first language and are able to understand the challenges and even frustrations of living overseas and provide emotional support for each other. On the contrary, when it comes to one's sociocultural adjustment, it is expected that Assimilation approach is better than Separation approach, because one can familiarize oneself with the host environment by continuously participating in activities of the host society and interacting with people from the host culture or other cultural background.

Research Question 2

What is the relation between self-construals and the cross-cultural adjustment among Chinese international students? Do students who score high on both independence and interdependence have the best cross-cultural adjustment? Do certain sub-dimensions of independence (e.g., direct communication, autonomy) and interdependence (e.g., harmony & conformity) contribute more to cross-cultural adjustment than other sub-dimensions?

Hypothesis 2a: It is predicted that interdependent self-construal is positively associated with psychological adjustment, while independent self-construal is positively associated with sociocultural adjustment.

Hypothesis 2b: It is hypothesized that Chinese international students who score highly on both Independence and Interdependence will also score highly on both psychological and sociocultural adjustment.

Rationale: The second research question is designed to test the relation between international students' self-construals and cross-cultural adaptation. In general, independent self-construal was traditionally seen as a typical view of self in western individualist culture. Previous empirical studies suggested that independent self-construal could facilitate international students' psychological adjustment while they studied in the western culture, while interdependent self-construal was not predictive of their cross-cultural adjustment (e.g., Cross, 1955; Yamaguchi & Wiseman, 2001; Oguri & Gudykunst, 2002). However, the traditional view and previous studies tend to overlook a variety of sub-dimensions under the broad notions of Independence and Interdependence.

Both independent and interdependent self-views actually coexist in each individual and are revealed variedly according to the context.

In the current study, it is expected that certain sub-dimensions of Interdependence, such as relatedness with others, sociability, a sense of belonging, and harmony, are associated with psychological adjustment. These sub-dimensions imply a source of social support, which has been proved to be a vital role in influencing mental adjustment during cross-cultural transitions (e.g., Ward & Kennedy, 1993b). On the other hand, it is predicted that certain dimensions of Independence, such as autonomy, direct communication, and uniqueness, are associated with one's sociocultural adjustment. This is because all of these characteristics are valued in an individualist society such as the United States. Furthermore, it is expected that individuals who are both independent and interdependent can adapt themselves best both psychologically and socioculturally when they are overseas. This is because it implies they are able to maintain a flexible self in responding to a changing environment. It is claimed that both autonomy (a dimension of Independence) and relatedness (a dimension of Interdependence) are universal human needs, thus autonomous-related self is a candidate for a healthy universal (Kagitçibasi, 2005).

Research Question 3

What is the association between perceived cultural distance and cross-cultural adjustment among Chinese international students?

Hypothesis 3: It is predicted that the higher Chinese international students

perceive the cultural distance, the more difficult it is for them to adapt themselves to the new environment, particularly in terms of sociocultural adjustment.

Rationale: The third research question is designed to test the relation between Chinese international students' perceived cultural distance and cross-cultural adjustment. It is predicted that the larger one perceives cultural dissimilarities between the home culture and the host culture, the more difficult it is for one to be able to adapt him/herself to the new society. Higher perceived cultural distance can lead to higher difficulty in social integration (Redmond & Bunyi, 1993), less identification with the host nationals, and less perceived social acceptance (Nesdale & Mak, 2003), which in turn increases the difficulties in one's psychological and sociocultural adjustment.

Research Question 4

What is the relation between English self-confidence and cross-cultural adjustment among Chinese international students?

Hypothesis 4: It is predicted that English self-confidence is positively related to the degree of cross-cultural adjustment, particularly sociocultural adjustment.

Rationale: The fourth research question is designed to test the link between international students' English self-confidence and their cross-cultural adjustment. It is expected that the higher the language self-confidence, the better one is able to adapt him/herself into the new society. Higher confidence in using the second language enables one to practice more in various settings and enhances their language fluency and proficiency, which leads to higher effectiveness in communication. Thus, high language

self-confidence facilitates the efficacy in dealing with a range of daily tasks and allows one to successfully adjust him/herself in a new cultural context. Such facilitation happens directly in the socio-cultural domain and indirectly benefits one's psychological well-being as one experiences less frustrations in dealing with daily life tasks.

Research Question 5

Among the predictive variables of the current study, what are the possible predictors of psychological adjustment and sociocultural adjustment, respectively?

Hypothesis 5a: Acculturation strategies (especially the dimension of cultural maintenance) and interdependent self-construal (e.g., belonging, relatedness, sociability) will predict psychological adjustment among Chinese international students.

Hypothesis 5b: Acculturation strategies (especially the dimension of participation in the host society), independent self-construals (e.g., uniqueness, direct communication), perceived cultural distance, and English self-confidence will predict sociocultural adjustment among Chinese international students.

Rationale: The fifth research question is designed to test the distinctive predictors of psychological and sociocultural adjustment, respectively. It has been proved that varied factors contribute differentially to the two aspects of adjustment (e.g., Searle & Ward, 1990). Although some factors can serve as predictors of both aspects, and both aspects can mutually influence each other in a complicated way, it is believed that each factor impacts a certain aspect of adjustment more directly than the other aspect.

Psychological adjustment involves emotional aspect and relates to factors which

influence psychological status. Social support has been considered and proved to be one of the pivotal factors that helps one to deal with negative emotions such as depression and frustration; thus it is expected that certain dimensions of interdependent self-construal (i.e., relatedness, sociability) will predict psychological adjustment. Furthermore, support from one's own ethnic community usually can provide a more effective intervention, as people from the same cultural background share similar experience in various cross-cultural challenges; thus it is predicted that maintaining relationships with people from the home culture as an acculturation strategy can facilitate psychological adjustment in a cross-cultural environment.

In terms of sociocultural adjustment, which involves cognitive aspect, it is expected that participation in the host society (a dimension of acculturation strategy), certain dimensions of independent self-construal (e.g., autonomy, direct communication), perceived cultural distance, and English self-confidence will be the predictors. Frequent participation in the host society can enhance one's understanding and familiarity with the host society; autonomy and direct communication can help international students to behave in a socially desirable way in an individualist culture; smaller perceived cultural distance helps to fit people for the social and cultural environment of the new society; and English self-confidence serves as a crucial predictor of sociocultural adjustment because higher confidence and comfort in using the primary language of the host society can help people to carry out various life tasks properly and successfully.

Research Question 6

Does perceived cultural distance serve as a moderator in influencing the relation between acculturation strategies and cross-cultural adjustment among Chinese international students?

Hypothesis 6a: It is hypothesized that perceived cultural distance will moderate the relation between acculturation strategies and cross-cultural adjustment. The association between maintenance of cultural identity and psychological adjustment will be stronger among people who perceive higher cultural distance than people who perceive lower cultural distance (*Figure 4*).

Hypothesis 6b: On the other hand, the association between participation in the host society and sociocultural adjustment will be stronger among people who perceive lower cultural distance than it is among people who perceive higher cultural distance (*Figure 5*).

Figure 4

The Hypothetical Moderating Effect of Perceived Cultural Distance between Cultural Maintenance and Psychological Adjustment (*Hypothesis 6a*)

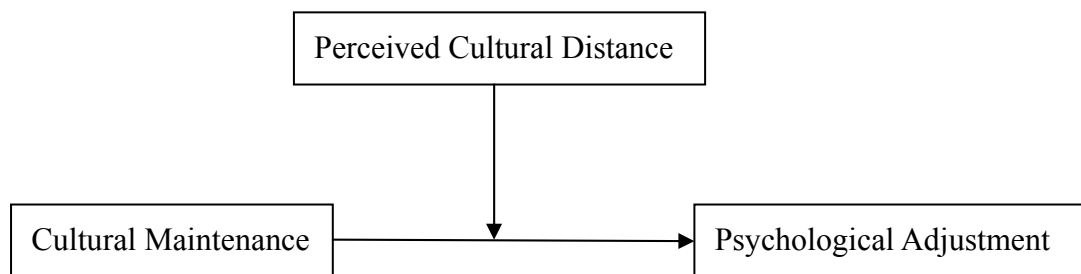
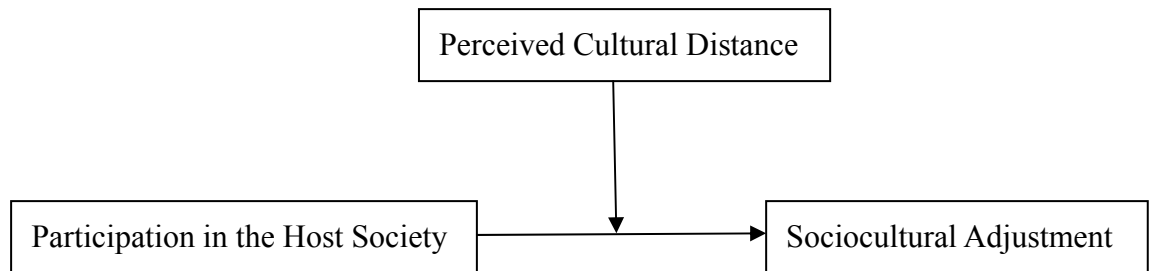


Figure 5

The Hypothetical Moderating Effect of Perceived Cultural Distance between Participation in the Host Society and Sociocultural Adjustment (*Hypothesis 6b*)



Rationale: The sixth research question intends to test the moderating effect of perceived cultural distance in international students' cross-cultural adjustment. Both theoretical (Berry, 1997) and empirical (e.g., Waxin, 2004; Stahl & Caligiuri, 2005) evidence have shown that cultural distance plays a moderating role in cross-cultural adjustment. It is expected that higher perceived cultural distance can strengthen the relation between ones' identification with the home culture and the psychological adjustment. Higher perceived cultural distance may cause a sense of alienation and deter social integration in a foreign environment, which in turn leads to seeking support from home cultural groups for psychological comfort. Lower perceived cultural distance, on the other hand, can reinforce the association between one's participation in the host society and the sociocultural adjustment, because lower perceived cultural distance is conducive to one's social integration and sociocultural adjustment.

Research Question 7

Does self-construals serve as a mediator in influencing the relation between acculturation strategies and cross-cultural adjustment among Chinese international students?

Hypothesis 7a: it is hypothesized that interdependent self-construal will mediate the relation between cultural maintenance and psychological adjustment. Cultural maintenance will influence psychological adjustment through interdependent self-construal.

Hypothesis 7b: it is hypothesized that independent self-construal will mediate the relation between participation in the host society and sociocultural adjustment. Participation in the host society will influence sociocultural adjustment through independent self-construal.

Figure 6

The Hypothetical Mediating Effect of Interdependent Self-Construal between Cultural Maintenance and Psychological Adjustment (*Hypothesis 7a*)

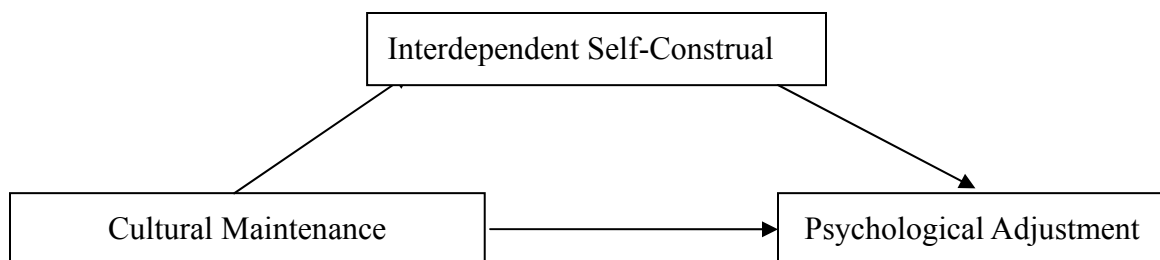
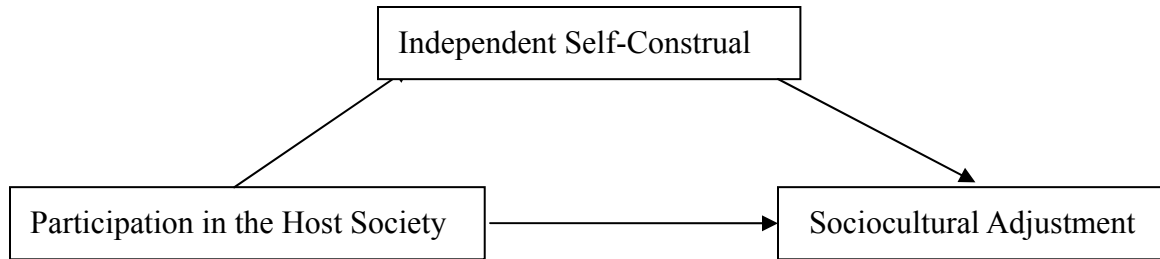


Figure 7

The Hypothetical Mediating Effect of Independent Self-Conceptual between Participation in the Host Society and Sociocultural Adjustment (*Hypothesis 7b*)



Rationale: The seventh research question is designed to test if self-construals mediate the relation between Chinese international students' acculturation strategies and their cross-cultural adjustment. This is somewhat an exploratory hypothesis; no previous studies have been found which tested the possible mediating role of self-construals in influencing cross-cultural adjustment. Independent and interdependent self-views might influence individuals' cross-cultural adjustment in a more direct way than acculturation strategies (behavioral variable), as self-construals are a personality variable and are usually predetermined. If the mediating effect of self-construals mentioned above does exist, it is further expected that specific sub-dimensions (e.g., *relatedness* for interdependence, *direct communication* for independence) will be stronger mediators than others.

Research Question 8

What is the role of English self-confidence in influencing: a) the relation between acculturation strategies and cross-cultural adjustment, and b) the relation between self-construals and cross-cultural adjustment? Does English self-confidence act as a mediator in influencing the relation between acculturation strategies and cross-cultural adjustment? Also, does English self-confidence act as a mediator in influencing the relation between self-construals and cross-cultural adjustment among Chinese international students?

Hypothesis 8a: It is hypothesized that English self-confidence will act as a mediator in the relation between acculturation strategies (particularly in reference with the dimension of participation in the host society) and sociocultural adjustment (*Figure 8*).

Hypothesis 8b: It is predicted that English self-confidence will act as a mediator in the relation between independent self-construal and sociocultural adjustment. (*Figure 9*)

Figure 8

The Hypothetical Mediating Effect of English Self-Confidence between Participation in the Host Society and Sociocultural Adjustment (*Hypothesis 8a*)

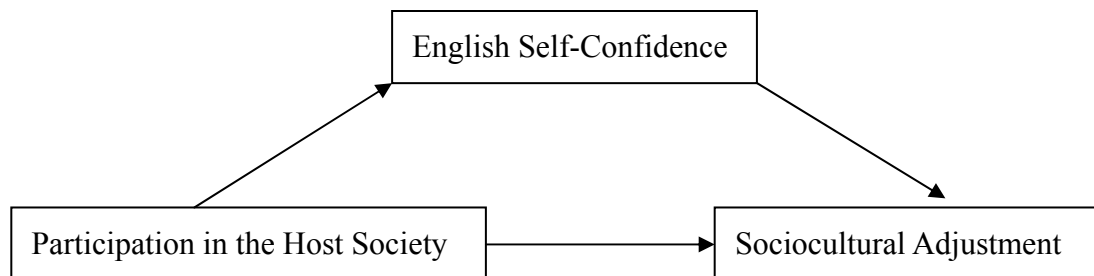
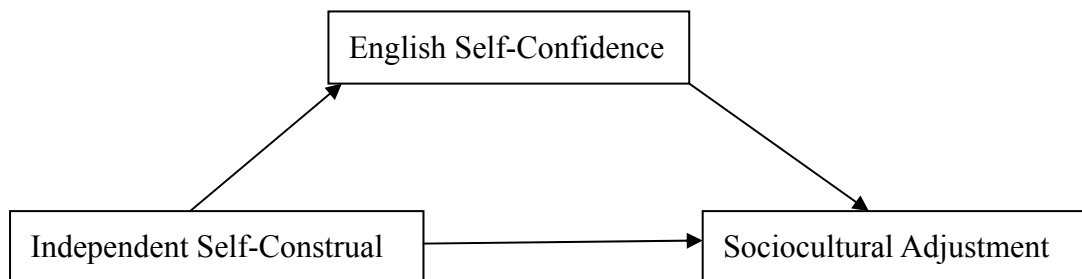


Figure 9

The Hypothetical Mediating Effect of English Self-Confidence between Independent Self-Construal and Sociocultural Adjustment (*Hypothesis 8b*)



Rationale: The last research question is designed to test the mediating effect of English self-confidence between a) acculturation strategies and cross-cultural adjustment, and b) self-construals and cross-cultural adjustment. It is expected that self-confidence in using English as a second language will mediate the association between participation in

the host culture, which is a dimension of acculturation strategy, and cross-cultural adjustment. This hypothesis is based on previous studies which demonstrated the pivotal role that language self-confidence plays in mediating the influence of intercultural contact on cross-cultural adaptation (Yang et al., 2006). Frequencies of intercultural contact represent the degree of participation in the host society. A higher degree of participating in the new cultural context usually enhances one's cross-cultural adjustment, and such effect might occur through having higher self-confidence and comfort in using the host culture language.

In addition, it is expected that language self-confidence can mediate the relation between self-construals and cross-cultural adjustment. This hypothesis is based on previous studies which found that independent self-construal directly predicted English self-confidence (Yang et al., 2006) and is associated with greater communication effectiveness with host nationals (Yamaguchi & Wiseman, 2001). Because an independent sense of self is predictive of confidence in using the host language, which in turn predicts one's cross-cultural adjustment (both links have been revealed by previous studies), it is further anticipated that language self-confidence might play a mediating role in affecting the relation between self-construals and cross-cultural adjustment. This hypothesis is exploratory in nature since the mediating role of language self-confidence between self-construals and cross-cultural adjustment has not been examined to date.

Method

Participants and Procedure of Recruitment

An initial sample of two hundred and fifteen international students of Chinese heritage was included to participate in the study. I eliminated data from those participants who completed less than 70% of the questionnaires; as a result, one hundred and seventy-seven surveys were considered valid and were retained for data analysis. Prior to recruiting the participants, the research proposal was submitted to the Departmental Review Committee (DRC) in the Department of Educational Psychology and the Institutional Review Board (IRB) at the University of Texas at Austin to obtain their approval, ensuring that the study complies with the ethical standards established by the American Psychological Association.

All of the participants were recruited from a southwestern university in the United States. Many participants were involved in at least one of the following international student groups affiliated with the university: Austin Chinese Campus Christian Fellowship (ACCCF), Taiwanese Student Association (TSA), Taiwan-Texas Forum, Chinese Students and Scholars Association (CSSA), International Student Connection (ISC), and International Student Fellowship Ministry (ISFM). At the initial stage of data collection, I was able to get connected with a few members from each group through my personal contact. Then I sought help from these members by asking them to forward my survey information to other members who were qualified to partake in my study, so my survey was widely spread among the Chinese international student community.

Before the participants completed the questionnaires, they were requested to read

and sign a consent form (see Appendix H) which stated the purpose of the study and asked for consent to use the data in future publication of the study. Confidentiality of the data gathered from the study would be strictly kept. Participants could choose to complete the survey via paper version or online version; all participants completed the survey in their free time. For those who chose to complete the paper survey, I scheduled a time with them to pick up the questionnaire packet. The estimated time of completing the whole survey was approximately 20 minutes. All questionnaires were written in English.

Measures

In addition to the demographic background information, the questionnaire packet contains assessments of acculturation strategies, self-construals, perceived cultural distance, language self-confidence, psychological adjustment, and sociocultural adjustment.

Demographic Background Information. Chinese international students who participate in the study were asked to report their demographic information, such as their gender, age, major, nationality, ethnicity, marital status, native language, the time of arriving in the United States, and the length of residency in the United States (see Appendix A).

Acculturation Strategies. The Acculturation Index (AI; Ward, 1999) was modified and used to measure acculturation strategies in the current study. The original version of AI consists of 21 cognitive and behavioral items (e.g., food, recreational activities, language, world view, social customs). I dropped some items because of confusion or

inadequacy (e.g., general knowledge, political ideology, worldview), and added a few additional items (i.e., roommate choice, language usage). The acculturation strategy scale (see Appendix B) used in the current study has 17 items with two statements under each item. The first statement was always regarding the maintenance of the home culture, while the second statement was regarding one's participation in the U.S. society. Participants rated each statement on a 5-point scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). This approach resulted in two independent scores, measuring original cultural identification and host cultural identification, with higher scores representing stronger identification. This approach, when used in conjunction with a bipartite split technique, allows the investigation of the two acculturation dimensions as well as the four modes of acculturation in accordance with Berry's four mode acculturation strategies. The internal reliabilities of both identification scales were tested via Cronbach alphas and proved that both scales were fairly reliable ($\alpha = .81$ for cultural maintenance, and $.73$ for participation in the host society).

Self-Construals. The self-construal items were adopted from various Self-Construal scales (e.g., Cross et al., 2000; Kim & Leung, 1997; Oyserman, 2002; Singelis, 1994; Triandis, 1998), and a few additional items were created by myself. The conceptually created Self-Construal Scale contains four sub-dimensions for independent self-construal (i.e., autonomy, direct communication, uniqueness, and competition) and four sub-dimensions for interdependent self-construal (i.e., relatedness, sociability, belonging, and harmony & conformity). Item examples included "I prefer to be self-reliant rather than depend upon others" (autonomy); "I prefer to be direct and

forthright when dealing with people I've just met" (direct communication); "I enjoy being unique and different from others in many respects" (uniqueness); "I expect myself to be a competitive person in my academic field" (competition); "When I think of myself, I often think of my friends or my family" (relatedness); "It is important for me to have a considerable degree of social life" (sociability); "The security of being an accepted member of a group is very important to me" (belonging); "When I'm with my group, I watch my words so I won't offend others" (harmony & conformity). The scale had 38 items in total (see Appendix C), including 19 items for independent self-construal and 19 items for interdependent self-construal. Respondents were asked to rate each item on a 5-point Likert scale (1= strongly disagree, 5 = strongly agree).

Perceived Cultural Distance. The original version of Cultural Distance Index (CDI) developed by Babiker et al. (1980) was modified. Participants are asked to rate on a scale of 1 to 5 (1 = no difference, 5 = extreme difference) about how their own original backgrounds differ from their experiences in the new culture (in this case, the United States) in 16 areas (climate, physical environment, food, dressing style, leisure activities, pace of life, material comfort, language, family structure, family values, the usual age of getting married, education level, and the dominant religion; see Appendix D). Among the 16 areas, three items (transportation style, education style, communication style) were created by myself. Higher scores reflect greater perceived cultural distance. The internal reliability of the scale was tested via Cronbach alpha and proved that it was reliable ($\alpha = .84$).

English Self-Confidence. Clément and Baker's (2001) English language

confidence and English anxiety scale were employed and modified to assess participants' self-perceptions of confidence and comfort in using English. The final version had 12 items in total (e.g., "I believe that I am capable of listening and understanding English very well." "I am confident in my ability to write English correctly.") (see Appendix E). Participants were asked to rate the degree of agreement for each statement with regard to their language self-confidence on a 5-point scale (1 = strongly disagree, 5 = strongly agree). A high mean score indicates high self-confidence in using English. The Cronbach alpha was computed and showed a high internal reliability ($\alpha = .94$).

Psychological Adjustment. Previous researchers have employed different scales to measure international students or sojourners' psychological adjustment. For example, Ward and Kennedy (1993b, 1994) had used The Profile of Mood States (McNair, Lorr, & Droppleman, 1971) and Self-Rating Depression Scale (Zung, 1965) in their studies; Wang and Mallinckrodt (2006) employed the Brief Symptom Inventory 18 (Derogatis, 2000) to measure Chinese international students' psychological adjustment; Yang et al. (2006) used both Self-Esteem Scale (Rosenberg, 1965) and Beck Depression Inventory (BDI; Beck & Beck, 1972) as indexes of international students' psychological adjustment. However, among all the scales mentioned above, it was difficult to find a single scale which could well represent and measure international students' psychological adjustment. To date, there is no single psychological adjustment scale specifically developed for international students, thus it is preferred to employ items from multiple measures as indexes of international students' psychological adjustment in the current study.

To this regard, I have reviewed all the above scales and carefully picked up items

which were suitable for the situation of the target group – international students. Original items were modified or rewritten when necessary, and a few extra items were added. The final version of psychological adjustment instrument for the current study includes: a) four items drawn or modified from Self-Esteem Scale (Rosenberg, 1965) (e.g., “I take a positive attitude toward myself after I came to the U.S.” “Overall, I am satisfied with myself and my life after I came to the U.S.”); b) nine items drawn or modified from the Beck Depression Inventory (BDI; Beck & Beck, 1972) (e.g., “I am not as confident as I used to be since I came to the U.S.” “I feel more discouraged about my future than I used to be since I came to the U.S.”); c) four items drawn or modified from the Acculturative Stress Scale for International Students (ASSIS; Sandhu & Asrabadi, 1998) (e.g., “I feel homesick quite often.” “Sometimes I feel I am treated differently in an uncomfortable way because I am a foreign student.”); d) three additional items were created by the researcher (e.g., “I often feel lonely and isolated since I came to the U.S.” “I do not have a sense of belonging here.”). The final version of scale consists of 20 items in total (see Appendix F). Participants were asked to rate each item on a 5-point scale (1 = Strongly Disagree, 5 = Strongly Agree) to indicate their perception of psychological adjustment after they came to the United States, with higher scores representing greater levels of successful psychological adjustment (Negatively worded items were coded reversely). The Cronbach alpha was computed and showed a high internal reliability ($\alpha = .92$).

Sociocultural Adjustment. Ward and Kennedy’s (1999) Sociocultural Adaptation Scale was employed and modified for the present study. The scale measures participants’ experiences of the degree of social difficulties across various areas in everyday social

situations in the host society (e.g., “Finding food that you enjoy”; “Understanding American jokes and humor”). Participants are asked to rate each item on a 5-point scale (1 = no difficulty, 5 = extreme difficulty) with reference to the amount of social difficulty they have experienced. Higher scores indicate higher levels of social difficulty and poorer sociocultural adjustment. The modified version in the current study has 22 items in total (see Appendix G). Previous studies have used this scale with samples of students studying overseas (e.g., Chinese students in Singapore and Japanese students in New Zealand) and reported high internal reliability ranging from .84 to .91 (Ward & Kennedy, 1999). In the current study, the Cronbach alpha was computed and showed a high internal reliability ($\alpha = .93$).

Plan for Data Analysis

To test the hypotheses of the current study, statistical methods including factor analysis, correlation analysis, multivariate analysis of variance (MANOVA), and multiple regression analysis were utilized. Preliminary data analysis mainly consisted of factor analysis for validating the newly developed Self-Construal Scale, and the internal reliability analysis of each of the scales using Cronbach’s alpha. An alpha level was set at .05 for all the following data analyses.

Factor Analysis

The main purpose of conducting factor analysis in this study is to validate the Self-Construal Scale. This is a newly created scale with items derived from various scales

developed by different researchers. Using factor analysis is helpful for examining the consistency of sub-dimensions between the conceptually developed scales and empirically derived data results. According to the conceptually developed scales, there are four sub-dimensions for independent and interdependent self-construals, respectively. It will be informative to examine the results of factor analysis, compare the extracted factors with the original sub-dimensions, and determine which factors and items to retain.

Correlation Analysis

Bivariate Pearson correlations among all the predictive variables (i.e., acculturation strategies, self-construals, perceived cultural distance, and English self-confidence) and outcome variables (i.e., psychological adjustment and sociocultural adjustment) were calculated to examine the relations between various pairs of variables (Hypotheses 1a, 2a & 2b, 3, & 4). In addition, demographic variables (e.g., gender, age, the length of residence in the United States, marital status) were included in the correlation analysis.

Multivariate Analysis of Variance (MANOVA)

To test the first hypothesis (Hypotheses 1b & 1c) regarding the relation between acculturation strategies and cross-cultural adjustment, multivariate analysis of variance (MANOVA) techniques were utilized with four types of acculturation strategies (i.e., Integration, Separation, Assimilation, and Marginalization) as the independent variables and the two dimensions of cross-cultural adjustment (i.e., psychological and

socio-cultural adjustment) as the dependent variables.

Before running the MANOVA statistical analysis, I categorized all respondents into four types of acculturation strategies as the independent variables. Acculturation strategies were assessed by Acculturation Index which generated two mean scores, representing the two dimensions (i.e., maintenance of the original culture and participation in the host culture) for each respondent. The instrument was a 5-point scale, with 3 as the midpoint. Respondents whose mean scores fell below or equal to 3 were classified “low” on the scale, and those whose mean scores fell above 3 were classified “high” on the scale. Consequently, each respondent was classified as “high” or “low” on both dimensions. Such classification generated four groups representing four types of acculturation strategies in accordance with Berry’s theoretical model.

Doná and Berry (1994) argued that a midpoint split is a better choice than a median or mean split; having the midpoint as the cutting point makes the categorization to be theoretically based instead of basing the characteristics of the sample. For example, if all respondents give answers above 3 on both scales, all would be categorized as Integration approach according to a midpoint split. However, if using a median or a mean split, all respondents will be forced to be categorized into one of the four acculturation approaches. Such a median or a mean split will somewhat provide a distorted image of respondents stand regarding their acculturation strategies. Therefore, a midpoint split takes both the theoretical and statistical concerns into consideration, leading to a suitable procedure to analyze the data of the present study.

Multiple Regression Analysis

Finally, two sets of hierarchical multiple regression analyses, one for each of the dependent variables of interest (i.e., psychological adjustment & sociocultural adjustment), were conducted to examine the relative contribution of all predictive variables (i.e., acculturation strategies, self-construals, perceived cultural distance, language self-confidence) to the outcome variables (i.e., psychological and sociocultural adjustment). This was to test Hypotheses 5a & 5b, regarding the distinctive factors that contribute to varied dimensions of cross-cultural adjustment. Demographic variables including age and length of residence were first entered into the model. In the second step, the two dimensions of acculturation strategies (i.e., maintenance of the original culture and participation in the host culture) were entered to assess their unique contributions. Likewise, the two dimensions of self-construals (i.e., Independence and Interdependence) were entered to assess their unique contributions as the third step. Perceived cultural distance was entered as the fourth step, and language self-confidence was entered as the final step.

To test the moderating effects of perceived cultural distance (Hypotheses 6a & 6b) on the relation between acculturation strategies and cross-cultural adjustment, I followed the procedures suggested by Baron and Kenny (1986): a) the dependent variable (cross-cultural adjustment) was regressed on the independent variable (acculturation strategies); b) the dependent variable was regressed on the moderators (perceived cultural distance and self-construals, respectively); c) the dependent variable was regressed on a newly created variable which was derived through multiplying the independent variable

and the moderator. If all of the three steps mentioned above reveal statistical significance, then the existence of moderating effect would be confirmed.

To test the mediating effects mentioned in hypotheses 7a & 7b (if self-construals mediate the relation between acculturation strategy and cross-cultural adjustment), hypothesis 8a (if English self-confidence mediates the relation between acculturation strategies and cross-cultural adjustment), and hypothesis 8b (if English self-confidence mediates the relation between self-construals and cross-cultural adjustment), I again followed the procedures suggested by Baron and Kenny (1986): a) regressing the mediator (English self-confidence) on the independent variable (H8a: acculturation strategies; H8b: self-construals); b) regressing the dependent variable (cross-cultural adjustment) on the independent variable; c) regressing the dependent variable on the mediator; d) regressing the dependent variable on both the independent variable and the mediator. I expect to see statistical significance in each step; if the final regression equation indicates that the strength of the relation between the independent variable and the dependent variable is significantly reduced when the mediator is added to the model, the existence of the mediating effect will be confirmed.

CHAPTER 4

RESULTS

This chapter presents the data analysis results, including a) descriptive statistics regarding the sample, b) psychometric analysis for evaluating the scales used, c) t-tests for examining the differences between the Mainland Chinese and Taiwanese groups, d) effects of the demographic variables, and e) tests of the main hypotheses.

Descriptive Statistics of the Sample

Table 3 presents the descriptive statistics of demographic information and provides an overview of the sample characteristics in the current study.

Table 3

Descriptive Statistics of Demographic Information

Variable	Valid N	Missing	Mean	Std. Deviation	Range
Age	167	10	27.65 (Years)	4.55	30.33 years (17.42- 47.75)
Length of Residence	169	8	34.63 (Months)	30.54	174 months (2-176)

Variable	Valid N	Missing	Frequency	Percent
Gender	175	2		
Male			67	37.85
Female			108	61.01

Year in University	172	5		
Undergrad (1 st – 2 nd year)			12	6.78
Undergrad (Above 3 rd year)			9	5.08
Master			50	28.25
Doctorate			78	44.07
Post Doctorate			15	8.47
Non-Degree			8	4.52
Major	173	4		
Liberal Arts			10	5.65
Law			3	1.69
Social Studies			22	12.43
Business			21	11.86
Natural Science			39	22.40
Engineering			37	20.90
Education			29	16.38
Communication			4	2.26
Fine Arts			5	2.82
Other			3	1.69
Pre-experience Living in English Speaking Countries	175	2		
Yes			39	22.03
No			136	76.84
Come From	170	7		
China			82	46.33
Taiwan			75	42.37
Hong Kong			9	5.08
Singapore			2	1.13
Malaysia			2	1.13

Marital Status	175	2		
Single			113	63.84
Engaged			3	1.69
Married without Children			47	26.55
Married with Children			10	5.65
Divorced			2	1.13
Percentage of Chinese Students in Department	172	5		
Less than 5 %			68	38.42
5% - 10%			56	31.64
10% - 25%			35	19.77
25% - 50%			12	6.78
More than 50%			1	0.56

Psychometric Analysis of the Scales

Factor Analysis

The Self-Construal Scale used in this study is a newly created scale with items derived from various scales developed by different researchers. I conducted factor analysis to validate the scale and to examine the consistency of sub-dimensions between the conceptually developed scales and empirically derived data results. The conceptually developed scale has two broad dimensions (i.e., independence and interdependence), and each dimension has 19 items. Under the two broad dimensions, there are four sub-dimensions for independence (autonomy, direct communication, uniqueness, and competition) and four sub-dimensions for interdependence (relatedness, sociability, belonging, and harmony & conformity), respectively.

Table 4 presents an overview of the conceptually developed Self-Construal Scale.

Table 4

An Overview of the Conceptually Developed Self-Construal Scale

Dimension/ Sub-dimension	Item	Source
Independence		
Autonomy	#1. Having a lively imagination is important to me.	Singelis, 1994
	#9. Being able to take care of myself is a primary concern for me.	Singelis, 1994
	#17. I prefer to be self-reliant rather than dependent upon others.	Kim & Leung, 1997

	#25. Whenever I set a goal for myself, I usually highly focus on it and do my best to achieve the goal.	Newly-created item
	#33. It is important to me that I have autonomy over my own life.	Newly-created item
Direct Communication	#3. I'd rather say "No" directly, than risk being misunderstood.	Singelis, 1994
	#11. I prefer to be direct and forthright when dealing with people I've just met.	Singelis, 1994
	#19. Speaking up during a class is not a problem for me.	Singelis, 1994
	#27. I always state my opinions very clearly.	Oyserman, 2002
	#35. I usually express my thoughts directly when I communicate with others.	Newly-created item
	#37. I voice my own opinion in group discussions.	Kim & Leung, 1997
Uniqueness	#5. I enjoy being unique and different from others in many aspects.	Singelis, 1994
	#13. I enjoy being admired for my unique qualities.	Kim & Leung, 1997
	#21. Having my personal identity independent of others is very important to me.	Kim & Leung, 1997
	#29. It is important for me to keep my uniqueness when I am in group.	Newly-created item
Competition	#7. I expect myself to be a competitive person in my academic field.	Newly-created item
	#15. I tend to compete with others when I'm involved with a group project.	Newly-created item
	#23. I always do my best when I compete with others.	Triandis, 1998

	#31. It is important to me that I perform better than others on a task.	Oyserman, 2002
Interdependence		
Relatedness	#2. I often have the feeling that my relationships with others are more important than my own accomplishments.	Singelis, 1994
	#10. When I think of myself, I often think of my friends or my family.	Cross et al., 2000
	#18. My relationships with others are important to my sense of what kind of person I am.	Cross et al., 2000
	#26. It is important for me to feel connected to my campus life.	Lee & Davis, 2000
Sociability	#4. It is important for me to have a considerable degree of social life.	Newly-created item
	#34. Most of the time I enjoy engaging in group activities than solitary activities.	Newly-created item
	#12. I like to share little things with my friends.	Triandis, 1998
	#20. I always make efforts to interact with others properly.	Newly-created item
	#28. I make efforts to enhance my social skills.	Newly-created item
Belonging	#6. The security of being an accepted member of a group is very important to me.	Kim & Leung, 1997
	#14. It is important for me to have a sense of belonging in my academic department.	Newly-created item
	#22. I want to belong to a certain group or	Oyserman,

	organization.	2002
	#30. I enjoy being a part of a group or organization.	Oyserman, 2002
Harmony & Conformity	#8. I am careful to maintain harmony in my group.	Kim & Leung, 1997
	#16. When I'm with my group, I watch my words so I won't offend anyone.	Kim & Leung, 1997
	#24. I have respect for the authority figures with whom I interact.	Singelis, 1994
	#32. It is important for me to respect decisions made by the group.	Singelis, 1994
	#36. I seriously take my parents' advice into consideration when making important life decisions (such as education, career, or marriage).	Singelis, 1994
	#38. I will stay in a group if they need me, even when I'm not happy with the group.	Singelis, 1994

Step 1: Exploratory Factor Analysis for the Whole Scale

First, exploratory factor analysis was conducted on the whole Self-Construal Scale, which includes 38 items. Principal axis factoring (Affifi & Clark, 1990) was used to extract factors. As factors were expected to be correlated, I used Direct Oblimin rotation. As a result, 13 factors were extracted. However, it was difficult to label each component extracted from this result. For instance, 18 items fell into the first factor, which explained 14.55 % of variance. The 18 items belonged to several sub-scales among both the independent or interdependent self-construals. The second factor explained 7.84

% of variance and contained 8 items (# 6, 22, 4, 23, 2, 38, 18, 17). This factor again revealed the combination of items from different sub-scales, and thus was hard to label as well. The third factor explained 6.13 % of variance and contained 4 items (# 35, 19, 27, 3), all of which belonged to *direct communication* (see *Table 4*).

Table 5 presents part of the result derived from the factor analysis for the whole Self-Construal Scale, including the Eigenvalues, percentage of variance explained, items, and factor loadings. The original result extracted 13 components from 38 items, but only the first 4 components are presented here. The percentage of variance explained after the fourth component was too small (less than 5 %) and with only one or two items fell on it, thus is not reported here.

Figure 10 presents the scree plot of factors on the whole Self-Construal Scale.

Table 5

Part of the Results of Factor Analysis for the Whole Self-Construal Items (N = 177, Number of Items = 38): Eigenvalues, % of Variance Explained, Items, and Factor Loadings

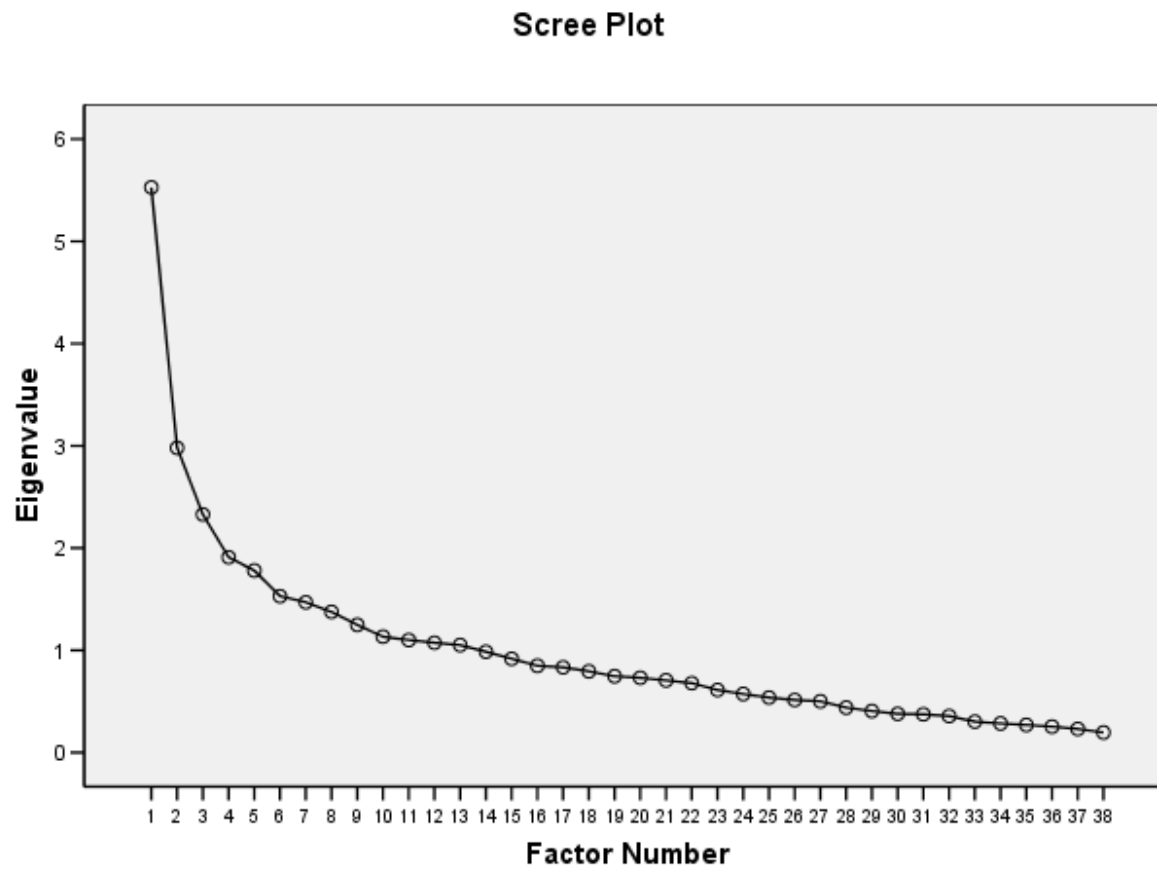
	Factor	1	2	3	4
	Eigenvalue	5.53	2.98	2.33	1.91
	% of Variance Explained	14.55	7.84	6.13	5.03
Items	Factor Loadings				
29.It is important for me to keep my uniqueness when I am in group.	0.61	0.22	0.05	-0.27	
31.It is important to me that I perform better than others on a task.	0.52	0.30	0.33	-0.37	
26.It is important for me to feel connected to my campus life.	0.50	-0.20	-0.12	0.13	
13.I enjoy being admired for my unique qualities.	0.49	0.13	0.21	-0.11	
28.I make efforts to enhance my social skills.	0.49	-0.14	-0.28	0.02	
20.I always make efforts to interact with others properly.	0.48	0.09	-0.11	-0.01	
7.I expect myself to be a competitive person in my academic field.	0.47	0.16	0.17	0.02	
5.I enjoy being unique and different from others in many aspects.	0.47	0.32	-0.11	-0.12	
30.I enjoy being a part of a group or organization.	0.46	-0.37	0.002	0.17	
34.Most of the time I enjoy engaging in group activities than solitary activities.	0.45	-0.30	-0.11	-0.12	
37.I voice my own opinion in group discussions.	0.44	0.13	-0.33	0.20	
25.Whenever I set a goal for myself, I usually highly focus on it and do my best to achieve the goal.	0.43	0.32	0.11	0.33	
1.Having a lively imagination is important to me.	0.42	-0.03	-0.17	0.06	
14.It is important for me to have a sense of belonging in my academic department.	0.42	-0.07	0.18	0.07	
21.Having my personal identity independent of others is very important to me.	0.42	0.32	-0.04	-0.25	
8.I am careful to maintain harmony in my group.	0.36	-0.12	0.066	0.24	
32.It is important for me to respect decisions made by the group.	0.35	0.07	0.13	0.34	

10. When I think of myself, I often think of my friends or my family.	0.34	-0.34	-0.11	0.06
6. The security of being an accepted member of a group is very important to me.	0.44	-0.59	0.15	0.04
22. I want to belong to a certain group or organization.	0.42	-0.43	0.16	0.05
4. It is important for me to have a considerable degree of social life.	0.28	-0.42	-0.26	-0.15
23. I always do my best when I compete with others.	0.40	0.41	0.19	-0.06
2. I often have the feeling that my relationships with others are more important than my own accomplishments.	0.26	-0.32	-0.06	-0.10
38. I will stay in a group if they need me, even when I'm not happy with the group.	0.12	-0.32	0.22	-0.09
18. My relationships with others are important to my sense of what kind of person I am.	0.26	-0.32	0.30	-0.13
17. I prefer to be self-reliant rather than dependent upon others.	-0.01	0.28	0.20	0.23
35. I usually express my thoughts directly when I communicate with others.	0.28	0.28	-0.56	0.06
19. Speaking up during a class is not a problem for me.	0.29	0.20	-0.39	0.10
27. I always state my opinions very clearly.	0.26	0.09	-0.34	0.16
3. I'd rather say "No" directly, than risk being misunderstood.	-0.02	0.14	-0.30	-0.05
15. I tend to compete with others when I'm involved with a group project.	0.37	0.15	0.20	-0.45
16. When I'm with my group, I watch my words so I won't offend anyone.	0.06	-0.04	0.28	0.41
24. I have respect for the authority figures with whom I interact.	0.22	0.08	0.18	0.30
9. Being able to take care of myself is a primary concern for me.	0.17	0.27	0.26	0.21
36. I seriously take my parents' advice into consideration when making important life decisions.	0.21	-0.06	-0.03	0.04
12. I like to share little things with my friends.	0.14	0.03	0.14	0.0002
11. I prefer to be direct and forthright when dealing with people I have just met.	0.13	-0.08	-0.23	-0.18
33. It is important to me that I have autonomy over my own life.	0.14	0.21	0.10	0.19

Note: The original result extracted 13 components from 38 items, but only the first 4 components are presented here. The percentage of variance explained after the fourth component was too small (less than 5 %) and with only one or two items fell on it, thus is not reported here.

Figure 10

Scree Plot of Factors on the Whole Self-Constraint Scale



Step 2: Conducting Factor Analysis Separately for the Two Scales

In order to obtain a more meaningful and desirable result for the broad self-construal construct, I ran factor analyses separately for the independent and interdependent self-construal scales. Each scale contains 19 items. Again, principal axis factoring was performed and Direct Oblimin rotation was used, as I expected the factors to be correlated. As a result, 6 components were extracted for independent and interdependent self-construal scales, respectively, according to the Eigenvalue larger than one criterion.

Among the 19 items of the independence scale, 11 items fell into the first factor (explaining 20.64 % of variance), which seemed to be a combination of *uniqueness* (# 29, 5, 13), and *competition* (# 31, 23, 7, 15). The second factor explained 9.77 % of variance and could be labeled as *direct communication* (# 35, 19, 27). The third factor explained 8.21 % of variance and only contained two items (# 9, 33) that represented *autonomy*. The fourth factor explained 7.83 % of variance and contained three items (# 11, 17, 3), which belong to either *direct communication* or *autonomy* and thus was hard to label. The fifth and sixth factors had too few items that loaded above .3 and were therefore not interpretable. These results suggested that there are at least three meaningful factors under the independence scale (see *Table 6*).

On the other hand, among the 19 items of the interdependence scale, 12 items fell into the first factor and explained 20.57 % of variance. This sub-scale seems to be a mixture of *Relatedness* (# 26, 10, 18, 2), *Sociability* (# 34, 28, 4), and *Belonging* (# 6, 22, 30, 14). The second factor explained 8.53 % of variance and contained two items (# 32,

24), both of which belong to *Harmony & Conformity*. The remaining factors (from the third to the sixth) did not reveal significant meanings. These results suggested that there are two meaningful factors within the interdependence scale (see *Table 7*).

Tables 6 and 7 present the factor analysis results for the independent and interdependent self-construal scales, respectively. Figures 11 and 12 present the scree plot of factors on the independent and interdependent self-construal scales, respectively.

Table 6

Factor Analysis for the Independent Self-Construal Scale (N = 177, Number of Items = 19), with Eigenvalue Larger than One

Factor	1	2	3	4	5	6
Eigenvalue	3.92	1.86	1.56	1.49	1.31	1.08
% of Variance Explained	20.64	9.77	8.21	7.83	6.92	5.69
Items	Factor Loadings					
29.It is important for me to keep my uniqueness when I am in group.	0.71	-0.12	0.19	-0.26	-0.19	-0.26
31.It is important to me that I perform better than others on a task.	0.64	-0.39	-0.11	-0.06	-0.004	0.14
5.I enjoy being unique and different from others in many aspects.	0.61	0.13	0.18	0.03	-0.25	-0.13
23.I always do my best when I compete with others.	0.56	-0.21	-0.28	0.09	0.45	-0.15
21.Having my personal identity independent of others is very important to me.	0.50	-0.04	0.21	-0.28	0.08	-0.02
13.I enjoy being admired for my unique qualities.	0.47	-0.15	0.14	0.08	-0.25	-0.17
7.I expect myself to be a competitive person in my academic field.	0.47	-0.17	-0.09	0.13	-0.04	0.20
25.Whenever I set a goal for myself, I usually highly focus on it and do my best to achieve the goal.	0.46	0.004	-0.05	0.27	0.40	-0.21
37.I voice my own opinion in group discussions.	0.44	0.44	-0.11	0.18	-0.19	0.17
15.I tend to compete with others when I'm involved with a group project.	0.43	-0.34	-0.35	-0.19	-0.09	0.27
1.Having a lively imagination is important to me.	0.35	0.21	-0.05	0.03	-0.19	0.04
35.I usually express my thoughts directly when I communicate with others.	0.36	0.57	0.11	-0.20	0.22	0.04
19.Speaking up during a class is not a problem for me.	0.34	0.43	-0.35	0.18	-0.14	0.04
27.I always state my opinions very clearly.	0.24	0.33	-0.17	-0.01	0.13	-0.05
9.Being able to take care of myself is a primary concern for me.	0.25	-0.11	0.37	0.20	0.02	0.25
33.It is important to me that I have autonomy over my own life.	0.22	0.021	0.36	0.15	0.18	0.11
11.I prefer to be direct and forthright when dealing with people I have just met.	0.07	0.09	0.0007	-0.40	0.21	0.24
17.I prefer to be self-reliant rather than dependent upon others.	0.12	-0.03	0.28	0.38	0.12	0.17
3.I'd rather say "No" directly, than risk being misunderstood.	0.06	0.21	0.20	-0.29	0.14	0.07

Table 7

Factor Analysis for the Interdependent Self-Construal Scale (N = 177, Number of Items = 19), with Eigenvalue Larger than One

Factor	1	2	3	4	5	6
Eigenvalue	3.90	1.62	1.43	1.35	1.28	1.09
% of Variance Explained	20.57	8.53	7.55	7.11	6.71	5.73
Items	Factor Loadings					
6.The security of being an accepted member of a group is very important to me.	0.72	-0.14	0.30	-0.04	-0.07	-0.06
22.I want to belong to a certain group or organization.	0.56	0.02	0.13	-0.43	0.25	0.03
30.I enjoy being a part of a group or organization.	0.54	0.05	0.04	-0.29	0.09	-0.15
34.Most of the time I enjoy engaging in group activities than solitary activities.	0.54	-0.13	-0.25	-0.07	-0.12	0.12
26.It is important for me to feel connected to my campus life.	0.53	0.10	-0.29	0.001	0.05	-0.16
28.I make efforts to enhance my social skills.	0.47	0.0	-0.36	0.11	-0.13	0.08
10.When I think of myself, I often think of my friends or my family.	0.46	0.01	-0.04	0.003	-0.04	-0.11
4.It is important for me to have a considerable degree of social life.	0.46	-0.36	-0.21	0.09	0.002	-0.17
18.My relationships with others are important to my sense of what kind of person I am.	0.41	-0.16	0.25	0.15	0.13	0.26
8.I am careful to maintain harmony in my group.	0.40	0.16	0.14	0.36	-0.17	-0.24
2.I often have the feeling that my relationships with others are more important than my own accomplishments.	0.40	-0.32	0.04	0.29	0.09	-0.02
14.It is important for me to have a sense of belonging in my academic department.	0.36	0.20	-0.01	-0.01	0.25	-0.02
32.It is important for me to respect decisions made by the group.	0.28	0.51	0.04	-0.01	-0.27	0.001
24.I have respect for the authority figures with whom I interact.	0.17	0.38	0.20	0.08	-0.07	-0.03
38.I will stay in a group if they need me, even when I'm not happy with the group.	0.29	-0.21	0.39	-0.04	-0.35	0.21
36.I seriously take my parents' advice into consideration when making important life decisions.	0.21	0.15	-0.08	-0.27	-0.17	0.11
12.I like to share little things with my friends.	0.11	0.08	-0.003	0.05	0.33	0.17
16.When I'm with my group, I watch my words so I won't offend anyone.	0.12	0.23	0.22	0.25	0.29	-0.05
20.I always make efforts to interact with others properly.	0.34	0.24	-0.25	0.22	0.04	0.37

Figure 11

Scree Plot of Factors on the Independence Scale

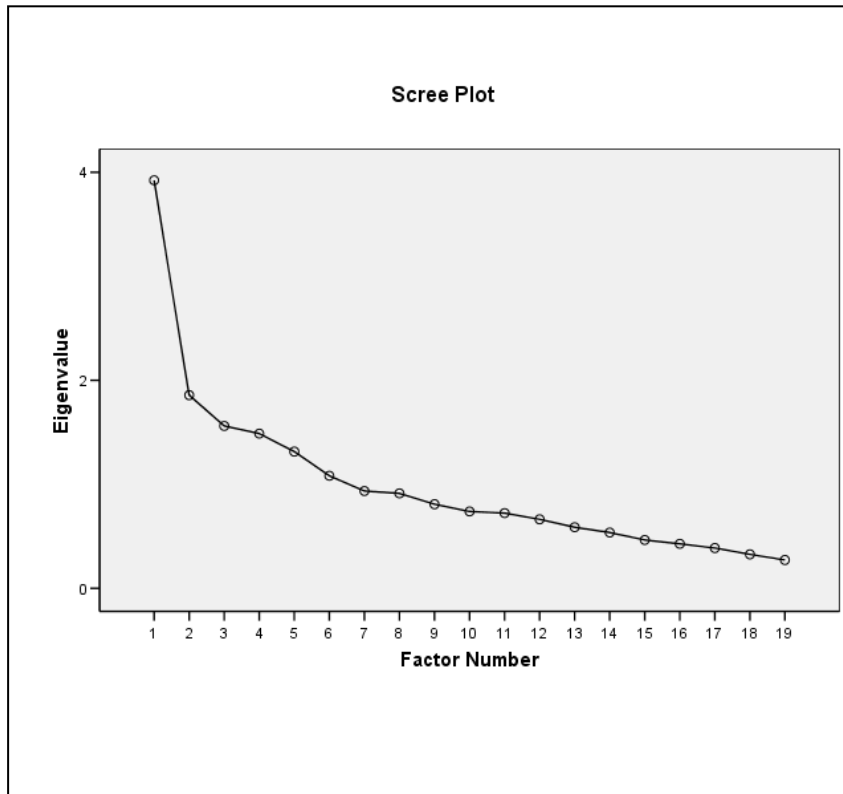
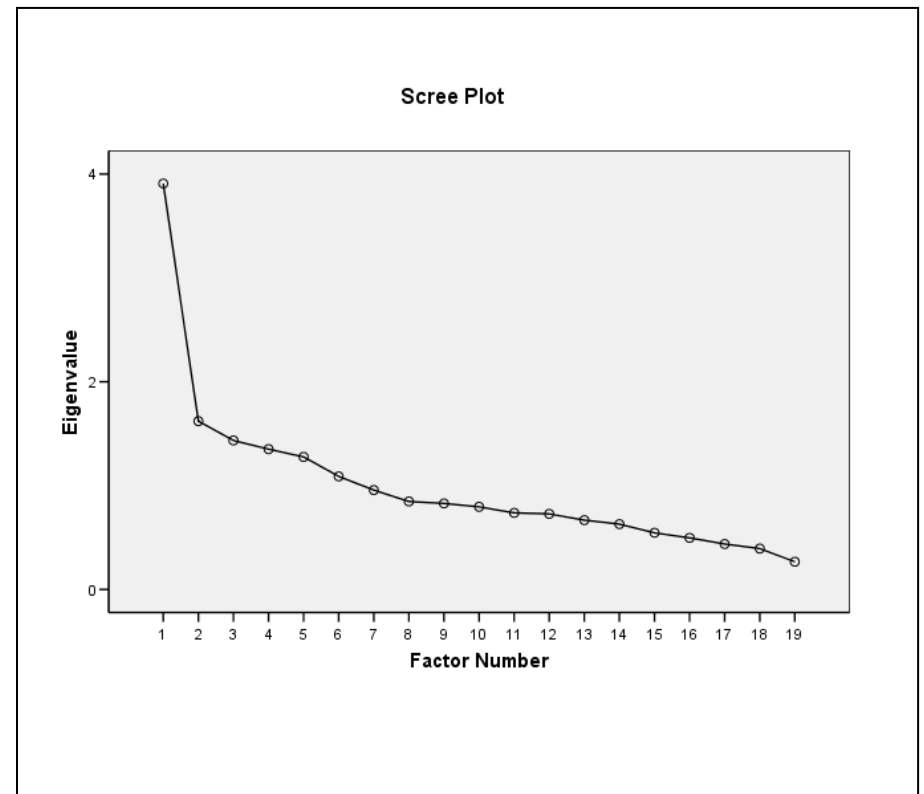


Figure 12

Scree Plot of Factors on the Interdependent Scale



Step 3: Reducing the Number of Items for the Independence and Interdependence Scales

In order to decide which items to retain on the Independence and Interdependence scales, I ran the factor analysis again for both scales. Instead of using the “Eigenvalues over one” option, I forced the number of extracted factors to be three for the Independence scale and two for the Interdependence scale, according to the result of my second step factor analysis. Items whose loading coefficients reached a satisfactory level at .30 were retained.

A few items cross-loaded on two factors and were included in initial reliability calculations of all factors on which they loaded. These cross-loaded items were then retained only in the scale with which they had the highest item-total correlation and to which they made the highest contribution to the alpha reliability coefficient. For example, item #37 “I voice my own opinion in group discussions” cross-loaded on both factor one (uniqueness + competition) and factor two (direct communication), with loading coefficient .44 on factor one and .41 on factor two. It had a higher item-total correlation on factor two (.50) than on factor one (.30). Accordingly, I retained item #37 in factor two rather than in factor one. Following the similar procedure, item #9 “Being able to take care of myself is a primary concern for me” cross-loaded on factor one (uniqueness & competition) and factor three (autonomy) and was retained on factor three. After removing #37 and #9 from factor one, the alpha coefficient was slightly increased (from .774 to .778). Eventually, ten items (#29, 31, 5, 23, 21, 7, 13, 25, 15, 1) were retained on factor one (uniqueness + competition), with alpha equals .78; four items (# 35, 19, 27, 37) were retained on factor two (direct communication), with alpha equals .63;

three items (# 9, 33, 17) were retained on factor three (autonomy), with alpha equals .49. These three sub-scales made up the finalized Independent Self-Construal Scale.

For the interdependence scale, I forced the number of extracted factors to be two. After checking cross-loaded items and deleting items to reach a better alpha coefficient, twelve items were retained in factor one (# 6, 34, 26, 30, 22, 28, 10, 4, 18, 2, 14, 20), with the alpha coefficient .78. Three items were retained in factor two (# 8, 32, 24), with the alpha coefficient .47. Factor one is a combination of items from relatedness, sociability, and belonging; factor two could be labeled as *harmony & conformity*.

Table 8 presents the three-factor solution for the Independent Self-Construal scale, and Table 9 presents the two-factor solution for the Interdependent Self-Construal scale.

Table 8

Three-Factor Solution for the Independent Self-Construal Scale

	Factor	1	2	3
		Uniqueness+	Direction	
	Label	Competition	Communication	Autonomy
	Item Numbers	10	4	3
	Alpha Coefficient	.78	.63	.49
Items	Factor Loadings			
29.It is important for me to keep my uniqueness when I am in group.	0.68	-0.13	0.18	
31.It is important to me that I perform better than others on a task.	0.65	-0.41	-0.12	
5.I enjoy being unique and different from others in many aspects.	0.60	0.10	0.09	
23.I always do my best when I compete with others.	0.51	-0.15	-0.13	
21.Having my personal identity independent of others is very important to me.	0.50	-0.07	0.31	
7.I expect myself to be a competitive person in my academic field.	0.47	-0.17	-0.16	
13.I enjoy being admired for my unique qualities.	0.46	-0.16	0.03	
25.Whenever I set a goal for myself, I usually highly focus on it and do my best to achieve the goal.	0.42	0.01	-0.02	
15.I tend to compete with others when I'm involved with a group project.	0.41	-0.28	-0.25	
1.Having a lively imagination is important to me.	0.35	0.21	-0.09	
37.I voice my own opinion in group discussions.	0.44	0.41	-0.16	
35.I usually express my thoughts directly when I communicate with others.	0.36	0.53	0.27	
19.Speaking up during a class is not a problem for me.	0.36	0.47	-0.42	
27.I always state my opinions very clearly.	0.24	0.34	-0.09	
9.Being able to take care of myself is a primary concern for me.	0.24	-0.12	0.22	
33.It is important to me that I have autonomy over my own life.	0.22	-0.004	0.29	
17.I prefer to be self-reliant rather than dependent upon others.	0.11	-0.04	0.12	

Table 9

Two-Factor Solution for the Interdependent Self-Construal Scale

	Factor	1	2
	Label	Relatedness + Sociability + Belonging	Harmony & Conformity
Item Numbers		12	3
Alpha Coefficient		.78	.47
Items	Factor Loadings		
6.The security of being an accepted member of a group is very important to me.		0.71	-0.08
34.Most of the time I enjoy engaging in group activities than solitary activities.		0.53	-0.15
30.I enjoy being a part of a group or organization.		0.53	0.06
22.I want to belong to a certain group or organization.		0.52	0.04
26.It is important for me to feel connected to my campus life.		0.52	0.05
10.When I think of myself, I often think of my friends or my family.		0.47	0.01
4.It is important for me to have a considerable degree of social life.		0.46	-0.38
28.I make efforts to enhance my social skills.		0.45	-0.04
18.My relationships with others are important to my sense of what kind of person I am.		0.40	-0.11
2.I often have the feeling that my relationships with others are more important than my own accomplishments.		0.39	-0.31
14.It is important for me to have a sense of belonging in my academic department.		0.36	0.18
20.I always make efforts to interact with others properly.		0.32	0.14
8.I am careful to maintain harmony in my group.		0.38	0.36
32.It is important for me to respect decisions made by the group.		0.28	0.51
24.I have respect for the authority figures with whom I interact.		0.17	0.41

Reliabilities of the Scales

After conducting the factor analysis and deciding which items to retain within the Self-Construal Scales, I computed the Cronbach's alpha coefficients to estimate the reliability of each scale administered in this study. The results showed that majority of the scales used in this study demonstrated strong reliability: Cultural Maintenance (Alpha = .83), Participation in the Host Society (Alpha = .73), Independence (Alpha = .77) and its three sub-scales (Uniqueness + Competition, Alpha = .78; Direct Communication, Alpha = .63; Autonomy, Alpha = .49), Interdependence (Alpha = .78) and its two sub-scales (Relatedness + Sociability + Belonging, Alpha = .78; Harmony & Conformity, Alpha = .47), Perceived Cultural Distance (Alpha = .84), English Self-Confidence (Alpha = .94), Psychological Adjustment (Alpha = .92), and Sociocultural Adjustment (Alpha = .93).

Two sub-scales, *Autonomy* and *Harmony & Conformity*, yielded very low reliability estimates. However, both subscales consisted of only three items, and despite this small number of items, they still yielded reliability coefficients of .49 and .47, respectively. This suggests that the two sub-scales may have some meaning and are worth exploring further. The other concern was that removing *Harmony & Conformity* sub-scale would make the Interdependence Scale become a single-solution scale, which is not preferred for the subsequent analyses. I therefore decided to retain the two sub-scales in my following analyses.

Table 10 presents the means, standard deviations, number of items, and the internal reliabilities of each scale.

Table 10

Means, Standard Deviations (*SD*), Number of Items, and Internal Reliabilities of Each Scale

Scale	Means (SD)	Number of Items	Reliability Coefficient (Cronbach's Alpha)
Acculturation Strategies			
Cultural Maintenance	3.39 (.49)	17	.81
Participation in the Host Society	3.24 (.40)	17	.73
Self-Constraint			
Independence	3.61 (.80)	17	.77
Uniqueness + Competition	3.59 (.81)	10	.78
Direct Communication	3.42 (.81)	4	.63
Autonomy	3.95 (.79)	3	.49
Interdependence	3.64 (.73)	15	.78
Relatedness + Sociability + Belonging	3.57 (.76)	12	.78
Harmony & Conformity	3.91 (.62)	3	.47
Perceived Cultural Distance	3.54 (.49)	16	.84
English Self-Confidence	3.52 (.72)	13	.94
Cross-Cultural Adjustment			
Psychological Adjustment	3.72 (.62)	20	.92
Sociocultural Adjustment	3.94 (.60)	22	.93

T-tests for the Differences between the Mainland Chinese and Taiwanese Groups

Participants from Mainland China (N = 82) and from Taiwan (N = 75) formed the two predominant groups in this study. To examine if the country of origin would influence the study results, I conducted t-tests to compare the mean differences of each scale between these two groups. Table 11 presents the t-test results, showing that these two groups differed in cultural maintenance, autonomy, and harmony & conformity. The Mainland Chinese group showed a higher tendency in Chinese cultural maintenance than the Taiwanese group, while the Taiwanese group showed stronger autonomy and harmony & conformity than the Mainland Chinese group. Other than these three scales, the two groups did not show significant differences in other variables.

Table 11

T-Test Results for Mean Differences between the Mainland Chinese and Taiwanese Groups

Scale	Mainland Chinese	Taiwanese	Mean Difference
Cultural Maintenance	3.47	3.31	.16*
Participation in the Host Society	3.20	3.25	-.05
Independent Self-Construal	3.59	3.61	.00
Indep_Unique+Competence	3.60	3.56	.04
Indep_DirectCommunication	3.42	3.39	.03
Indep_Autonomy	3.80	4.08	-.28**
Interdependent Self-Construal	3.63	3.63	.00
Interdep_Related+Social+Belonging	3.59	3.53	.06
Interdep_Harmony&Comformity	3.78	4.02	-.24***
Perceived Cultural Distance	3.56	3.56	.00

English Self-Confidence	3.39	3.58	-.19
Psychological Adjustment	3.61	3.81	-.20
Sociocultural Adjustment	3.91	3.98	-.07

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Effects of the Demographic Variables

Categorical Variables: Gender, Major, Marital Status, Etc.

Multivariate analyses of variance (MANOVA) were conducted to examine the effects of categorical demographic variables (i.e., marital status, gender, major, having pre-experience living in English-speaking countries or not, and regions people come from) on the outcome variables (i.e., psychological and sociocultural adjustment)

The result showed a main effect of marital status. In this sample, 113 participants indicated that they were single, 3 were engaged, 47 were married with no children, 10 were married with children, and 2 were divorced. Because the group sizes of engaged and divorced participants were too small, they were not included in the analysis.

The result did not show any significance for psychological adjustment, but it revealed a slight significance for sociocultural adjustment, $F(2, 170) = 3.02$, $p = .05$ (see Table 12). The follow-up pairwise comparisons (see Table 13) showed that there was a significant difference between the married with children group and the married without children group ($p < .05$). Also, there was a significant difference between the married with children group and the single group. Overall, it showed that among the participants, those who were married with children had better sociocultural adjustment than those who

were married with no children and those who were single.

Other than the marital status, other demographic variables, such as gender, major, having pre-experience living in English-speaking countries or not, and regions people come from (e.g., China, Taiwan, or Hong Kong), were examined to see if they had influence on cross-cultural adjustment. However, none of these demographic variables showed significant effects.

Table 12

One-Way MANOVA: Mean, Standard Deviation, F value, and p-value of Marital Status for Psychological and Sociocultural Adjustment

Dependent Variables	Marital Status				
	Single (N = 113)	Married without Children (N = 47)	Married with Children (N = 10)		
	Mean (SD)			F	Sig. (p-value)
Psychological Adjustment	3.69 (.64)	3.73 (.62)	3.97 (.37)	0.87	.42
Sociocultural Adjustment	3.91 (.62)	3.92 (.61)	4.40 (.31)	3.02	.05*

Table 13

One-Way MANOVA: Pairwise Comparisons among Marital Status for Psychological and Sociocultural Adjustment

Dependent Variable	(I) Marital Status	(J) Marital Status	Mean Difference (I-J)	Sig.
Psychological Adjustment	Single	Married_NoChildren	-.03	.76
		Married_WithChildren	-.27	.19
	Married_NoChildren	Single	.03	.76
		Married_WithChildren	-.24	.28
	Married_WithChildren	Single	.27	.19
		Married_NoChildren	.24	.28
Sociocultural Adjustment	Single	Married_NoChildren	-.01	.92
		Married_WithChildren	-.49*	.02
	Married_NoChildren	Single	.01	.92
		Married_WithChildren	-.48*	.03
	Married_WithChildren	Single	.49*	.02
		Married_NoChildren	.48*	.03

Note: * $p < .05$

Continuous Variables: Age, Length of Residence in the U.S., Etc.

Among the demographic variables, there are four continuous variables: age, grade level (undergraduates, Master's or doctoral students), length of residence in the U.S., and percentage of Chinese students in their academic departments. Pearson correlations were calculated to examine the associations between these variables and the outcome variables.

The results showed that the length of residence in the U.S. ($M = 34.63$ months, SD

= 30.54) was significantly associated with both psychological adjustment ($r = .21$, $p < .01$) and sociocultural adjustment ($r = .23$, $p < .01$). The other three variables (i.e., age, grade level, percentage of Chinese students in their academic departments) did not reveal significant correlations with the outcome variables in the current study.

Another interesting result of the correlation analysis is the significant association between demographic variables and the communication variable (i.e., English self-confidence). Both the grade level and the percentage of Chinese students in their academic departments were negatively and significantly correlated with English self-confidence (for grade level, $r = -.22$, $p < .01$; for percentage of Chinese students in their academic departments, $r = -.16$, $p < .05$). The length of residence in the U.S. was positively associated with English self-confidence ($r = .37$, $p < .01$). These findings suggest that Chinese students who are in departments with more other Chinese students are likely to have lower English self-confidence.

Table 14 presents the correlations among all the variables

Table 14

Correlations among All Variables (N =177)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age	1.00																
2. Grade Level	.38**	1.00															
3. Length of Residence	.29**	.04	1.00														
4. Percentage of Chinese students in Departments	-.05	.04	.03	1.00													
5. Cultural Maintenance	.001	.05	-.14	-.01	1.00												
6. Participation in the Host Society	.05	-.08	.07	-.11	-.39**	1.00											
7. Independence	-.09	-.08	.06	-.14	-.02	.23**	1.00										
8. Indep_Unique+ Competition	-.16*	-.11	.01	-.10	.01	.20**	.91***	1.00									
9. Indep_DirectCom	.18*	.10	.11	-.13	-.09	.19*	.60***	.33***	1.00								
10. Indep_Autonomy	-.14	-.15*	.05	-.11	.02	.05	.44***	.22**	.03	1.00							
11. Interdependence	.01	-.05	-.03	-.11	.04	.24**	.37***	.40***	.23**	-.03	1.00						
12. Interdep_Belong + Relate+Social	-.02	-.05	-.07	-.11	.02	.24**	.32***	.37***	.21**	-.09	.97***	1.00					
13. Interdep_HarmonyConform	.10	-.01	.12	-.07	.07	.08	.32***	.29***	.17*	.20**	.49***	.28***	1.00				
14. Perceived Cultural Distance	.08	.13	.11	.03	.06	.00	-.08	-.05	-.09	-.03	.05	.05	.04	1.00			
15. English Self-Confidence	-.03	-.22**	.37***	-.16*	-.14	.33***	.36***	.26***	.35***	.18*	.12	.10	.11	.02	1.00		
16. Psychological Adjustment	.12	.05	.21**	-.02	-.11	.18*	.26***	.11	.33***	.25**	.04	.001	.16*	-.07	.36***	1.00	
17. Sociocultural Adjustment	.04	-.09	.23**	-.11	-.19**	.21**	.30***	.21**	.28***	.15*	.05	.03	.10	-.27***	.46***	.51***	1.00

Note: * p < .05 (2-tailed); ** p < .01 (2-tailed); *** p < .001 (2-tailed).

Hypothesis Testing

The following section presents the result of hypotheses testing of the eight research questions. A few hypotheses were slightly modified from what I presented in the previous chapter due to the results of factor analysis and correlation analysis.

Research Question 1: The Relation between Acculturation Strategies and Cross-Cultural Adjustment

What is the relation between acculturation strategies (which has two dimensions: *cultural maintenance* and *participation in the host society*) and the cross-cultural adjustment (which has two dimensions: *psychological adjustment* and *sociocultural adjustment*) among Chinese international students?

Hypothesis 1a: Maintenance of one's original cultural identity will be positively related to psychological adjustment, while the degree of participation in the host society will be positively associated with sociocultural adjustment.

Hypothesis 1b: Participants who adopt an Integration strategy (those who score highly on both cultural maintenance and participation in the host society) will score highly on psychological adjustment, followed by those who adopt Separation, Assimilation, and Marginalization strategies, respectively.

Hypothesis 1c: Participants who adopt an Integration strategy will score highly on sociocultural adjustment, followed by those who adopt Assimilation, Separation, and Marginalization strategies, respectively.

Correlation analysis was conducted to test Hypothesis 1a, which predicted that

cultural maintenance is positively related to psychological adjustment, while the degree of participation in the host culture is positively associated with sociocultural adjustment. The result did not reveal a significant association between cultural maintenance and psychological adjustment, but it revealed a significant negative association between cultural maintenance and sociocultural adjustment ($r = -.19, p < .05$). Participation in the host society was positively and significantly correlated with both psychological adjustment ($r = .18, p < .05$) and sociocultural adjustment ($r = .21, p < .01$) (see *Table 14*).

The preliminary t-test analyses revealed that the Mainland Chinese group and the Taiwanese group differed in Chinese cultural maintenance (a dimension of acculturation strategy), which suggests that the association between acculturation strategies and cross-cultural adjustment might vary among groups of different countries of origin. Thus I conducted correlation analyses for the Mainland Chinese and the Taiwanese groups separately to further test hypothesis 1a. Table 15 and Table 16 present the results for the Mainland Chinese group and the Taiwanese group, respectively. The results showed that cultural maintenance was negatively and significantly correlated with psychological and sociocultural adjustment among the Taiwanese group but not among the Mainland Chinese group. Participation in the host society, on the other hand, was positively and significantly correlated with psychological and sociocultural adjustment among the Taiwanese group but not among the Mainland Chinese group. This finding suggests that country of origin is a moderator of the association between acculturation strategies and cross-cultural adjustment.

Table 15

Mainland Chinese Group: The Correlations between Acculturation Strategies and Cross-Cultural Adjustment

	Psychological Adjustment	Sociocultural Adjustment
Cultural Maintenance	.12	-.05
Participation in the Host Society	.02	.10

Table 16

Taiwanese Group: The Correlations between Acculturation Strategies and Cross-Cultural Adjustment

	Psychological Adjustment	Sociocultural Adjustment
Cultural Maintenance	-.24*	-.29*
Participation in the Host Society	.27*	.28*

Hypotheses 1b and 1c, regarding the effects of acculturation strategy types on cross-cultural adjustment, were investigated through one-way multivariate analysis of variance (MANOVA). The categorization of the four acculturation types was done through the mid-point split method suggested by Doná and Berry (1994). The acculturation strategy scale includes two sub-scales: cultural maintenance and participation in the host society, and both are 5-point Likert scales, with 3 as the midpoint. Respondents whose mean scores fell below or equal to 3 were classified as “low” on the scale, while those whose mean scores fell above 3 were categorized as “high” on the scale. According to this method, each respondent was classified as “high” or “low” on both subscales, and consequently generated four types of acculturation strategy groups: Integration (N = 93), Separation (N = 46), Assimilation (N = 35), and Marginalization (N = 3). Because the group size of Marginalization was too small, it was dropped and not included in the MANOVA analysis.

The result revealed a main effect of acculturation strategy on psychological adjustment, $F(2, 174) = 3.47, p < .05$, as well as on sociocultural adjustment, $F(2, 174) = 3.73, p < .05$. In terms of psychological adjustment, the subsequent post-hoc pairwise comparisons showed that there was a significant mean difference between the Assimilation and Integration strategies ($p < .05$) as well as a significant difference between the Assimilation and Separation strategies ($p < .05$). However, the result did not show a significant difference between the Integration and Separation strategies. Overall, this analysis suggests that Assimilation is a better strategy than either the Integration or Separation strategy for psychological adjustment among Chinese international students

(see *Table 17*).

In terms of sociocultural adjustment, the subsequent post-hoc pairwise comparisons showed that there was a significant mean difference between the Assimilation and Integration strategies ($p < .05$), as well as a significant difference between the Assimilation and Separation strategies ($p < .01$). However, the result did not show a significant difference between Integration and Separation strategies. The results suggest that, when it comes to sociocultural adjustment among Chinese international students, Assimilation is the best acculturation strategy, followed by Integration, and Separation strategies (see *Table 18*).

Table 17

One-Way MANOVA: Mean, Standard Deviation, F value, and p-value of Acculturation Strategy Types for Psychological and Sociocultural Adjustment

Dependent Variables	Acculturation Strategy Types				
	Integration (N = 93)	Separation (N = 46)	Assimilation (N = 35)		
	Mean (SD)			F	Sig. (p-value)
Psychological Adjustment	3.68 (.60)	3.63 (.63)	3.97 (.64)	3.47	.03*
Sociocultural Adjustment	3.90 (.62)	3.82 (.57)	4.17 (.56)	3.73	.03*

Table 18

One-Way MANOVA: Pairwise Comparisons among Acculturation Strategy Types for Psychological and Sociocultural Adjustment

Outcome Variables	(I) Acculturation Strategy	(J) Acculturation Strategy	Mean Difference (I-J)	Sig. (p-value)
Psychological Adjustment	Integration	Separation	.04	.69
		Assimilation	-.29*	.02*
	Separation	Integration	-.04	.69
		Assimilation	-.33*	.02*
	Assimilation	Integration	.29*	.02*
		Separation	.33*	.02*
Sociocultural Adjustment	Integration	Separation	.08	.44
		Assimilation	-.27*	.03*
	Separation	Integration	-.08	.44
		Assimilation	-.35*	.01*
	Assimilation	Integration	.27*	.03*
		Separation	.35*	.01*

Note: * $p < .05$ (2 tailed).

In order to determine whether the result of the relation between acculturation strategies and cross-cultural adjustment might be different after controlling for some variables, I added covariates and conducted MANCOVA (Multiple Analysis of Covariance). The length of residence and English self-confidence were considered possible covariates. Interestingly, after controlling for these two variables, the significant effects of acculturation strategy types on psychological and sociocultural adjustment, which were revealed in the original MANOVA analyses, disappeared. The original p-values were .03 for both psychological and sociocultural adjustment, but now they are .08 for both. Table 19 presents the results of the MANCOVA analysis.

Table 19

One-Way MONCOVA: The Effects of Acculturation Strategy Types on Psychological and Sociocultural Adjustment, Controlling for Length of Residence and English Self-Confidence

Dependent Variables	Acculturation Strategy Types				
	Integration (N = 93)	Separation (N = 46)	Assimilation (N = 35)		
	Mean (SD)			F	Sig. (p-value)
Psychological Adjustment	3.67 (.60)	3.62 (.65)	3.96 (.66)	2.57	.08
Sociocultural Adjustment	3.90 (.62)	3.83 (.58)	4.17 (.57)	2.63	.08

Research Question 2: The Relation between Self-Construals and Cross-Cultural Adjustment

What is the relation between self-construals and cross-cultural adjustment among Chinese international students? Do students who score high on both independence and interdependence have the best cross-cultural adjustment? Do certain sub-dimensions of independence (e.g., direct communication, autonomy) and interdependence (e.g., harmony & conformity) contribute more to cross-cultural adjustment than other sub-dimensions?

Hypothesis 2a: Interdependent self-construal will be positively associated with psychological adjustment, while independent self-construal is positively associated with sociocultural adjustment.

Hypothesis 2b: Chinese international students who score highly on both Independence and Interdependence will also score highly on both psychological and sociocultural adjustment.

Hypothesis 2c: Certain sub-dimensions of independence (e.g., direct communication, autonomy) and interdependence (e.g., harmony & conformity) will contribute more to cross-cultural adjustment than other sub-dimensions

Correlation analysis was again used to test Hypothesis 2a. The result did not reveal a significant association between the broad interdependent self-construal scale and psychological adjustment, but *harmony & conformity*, which was one of the factors extracted from the interdependent self-construal scale, was significantly correlated with psychological adjustment ($r = .16, p < .05$). On the other hand, the result revealed a very

salient association between independent self-construal (including all the three factors extracted from the independent self-construal scale) and sociocultural adjustment as well as psychological adjustment.

Table 20 presents the correlations between all the self-construal variables and the two outcome variables.

Table 20

The Correlations between All Self-Construal Variables and Outcome Variables

	Psychological Adjustment	Sociocultural Adjustment
Independence (Broad Scale)	.26***	.30***
Independence: Uniqueness + Competition (Factor 1)	.11	.21**
Independence: Direct Communication (Factor 2)	.33***	.28***
Independence: Autonomy (Factor 3)	.25**	.15**
Interdependence (Broad Scale)	.04	.05
Interdependence: Belonging + Relatedness + Sociability (Factor 1)	.001	.03
Interdependence: Harmony & Conformity (Factor 2)	.16*	.10

Note: * $p < .05$ (2-tailed); ** $p < .01$ (2-tailed); *** $p < .001$ (2-tailed)

The preliminary t-test analyses revealed that the Mainland Chinese group and the Taiwanese group differed in autonomy (a sub-dimension of independent self-construal), and harmony & conformity (a sub-dimension of interdependent self-construal). These differences suggest that the association between self-construals and cross-cultural adjustment might vary among groups of different countries of origin. Thus I conducted correlation analyses for the Mainland Chinese and the Taiwanese groups separately. These are further tests for hypothesis 2a (the relation between self-construals and cross-cultural adjustment).

Table 21 and Table 22 present the results for the Mainland Chinese group and the Taiwanese group, respectively. However, the two groups did not show much difference with respect to the association between self-construals and cross-cultural adjustment.

Table 21

Mainland Chinese Group: The Correlations between Acculturation Strategies, Self-Construal Variables, and Outcome Variables

	Psychological Adjustment	Sociocultural Adjustment
Independence (Broad Scale)	.23*	.30**
Independence: Uniqueness + Competition (Factor 1)	.05	.20
Independence: Direct Communication (Factor 2)	.39**	.26*
Independence: Autonomy (Factor 3)	.20	.21
Interdependence (Broad Scale)	.08	.03
Interdependence: Belonging + Relatedness + Sociability (Factor 1)	.06	.03
Interdependence: Harmony & Conformity (Factor 2)	.10	.02

Note: * $p < .05$ (2-tailed); ** $p < .01$ (2-tailed); *** $p < .001$ (2-tailed)

Table 22

Taiwanese Group: The Correlations between Acculturation Strategies, Self-Construal Variables, and Outcome Variables

	Psychological Adjustment	Sociocultural Adjustment
Independence (Broad Scale)	.25*	.24*
Independence: Uniqueness + Competition (Factor 1)	.11	.16
Independence: Direct Communication (Factor 2)	.31**	.34**
Independence: Autonomy (Factor 3)	.23*	.02
Interdependence (Broad Scale)	-.03	.01
Interdependence: Belonging + Relatedness + Sociability (Factor 1)	-.05	-.01
Interdependence: Harmony & Conformity (Factor 2)	.10	.07

Note: * $p < .05$ (2-tailed); ** $p < .01$ (2-tailed); *** $p < .001$ (2-tailed)

Hypothesis 2b was tested via one-way MANOVA. Similar to the method of categorizing the acculturation strategies, participants were categorized into four types of self-construals. The difference was that, median, rather than the mid-point, was used as the cutting point on the two sub-dimensions this time. As a result, four types of combinations were generated: high-independence with high-interdependence (N = 58), high-independence with low-interdependence (N = 31), low-independence with high interdependence (N = 35), and low-independence with low-interdependence (N = 53). The results did not reveal any main effects of self-construal type on psychological or sociocultural adjustment (see *Table 23*).

Table 23

One-Way MANOVA: Mean, Standard Deviation, F value, and p-value of Self-Construal Types for Psychological and Sociocultural Adjustment

Dependent Variables	Self-Construal Types					
	H-Indep_ H-Interdep (N = 58)	H-Indep_ L-Interdep (N = 31)	L-Indep_ H-Interdep (N = 35)	L-Indep_ L-Interdep (N = 53)		
	Mean (SD)				F	Sig. (p-value)
Psychological Adjustment	3.88 (.62)	3.75 (.59)	3.59 (.53)	3.62 (.67)	2.24	.08
Sociocultural Adjustment	4.00 (.55)	4.12 (.49)	3.80 (.66)	3.87 (.65)	2.07	.11

Hypothesis 2c was tested using regression analysis. Two separate regression analyses were conducted for psychological adjustment and for sociocultural adjustment, respectively. According to the result of correlation analysis, *direct communication*, *autonomy*, and *harmony & conformity* were significantly correlated with psychological adjustment, which suggested that these sub-dimensions are potential predictors of psychological adjustment. Thus, these three sub-dimensions were entered into the regression model. The result revealed that direct communication ($\beta = .31, p < .001$) and autonomy ($\beta = .22, p < .01$) are contributors to psychological adjustment.

As for sociocultural adjustment, the result of correlation analysis suggested that all of the three sub-dimensions of independence are potential predictors, while none of the sub-dimensions of interdependence are potential predictors. Thus, only the three sub-dimensions of independence were entered into the regression model. The result revealed that only *direct communication* ($\beta = .24, p < .01$) contributed to sociocultural adjustment.

Table 24 and Table 25 present the effects of independent and interdependent self-construal sub-dimensions on psychological adjustment and sociocultural adjustment, respectively.

Table 24

The Effects of Independence and Interdependence (Sub-Scales) on Psychological Adjustment

Predictive Variables	R ²	F	B	(se)B	β
	.17	11.58***			
Independence : Direction Communication			.35	.08	.31***
Independence : Autonomy			.25	.08	.22**
Interdependence: Harmony & Conformity			.09	.10	.06

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 25

The Effects of Independence and Interdependence (Sub-Scales) on Sociocultural Adjustment

Predictive Variables	R ²	F	B	(se)B	β
	.11	4.30**			
Independence : Uniqueness + Competition			.14	.10	.11
Independence : Direction Communication			.26	.08	.24**
Independence : Autonomy			.13	.08	.12

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Research Question 3: The Relation between Perceived Cultural Distance and Cross-Cultural Adjustment

What is the association between perceived cultural distance and cross-cultural adjustment among Chinese international students?

Hypothesis 3: It is predicted that the higher Chinese international students perceive the cultural distance, the more difficult it is for them to adapt themselves to the new environment, particularly in terms of sociocultural adjustment.

The result of correlation analysis showed a significant negative association between perceived cultural distance and sociocultural adjustment ($r = -.27, p < .01$), while there was no significant association between perceived cultural distance and psychological adjustment. As predicted, perceived cultural distance had a stronger association with sociocultural adjustment than with psychological adjustment.

Research Question 4: The Relation between English Self-Confidence and Cross-Cultural Adjustment

What is the relation between English self-confidence and cross-cultural adjustment among Chinese international students?

Hypothesis 4: It is predicted that English self-confidence is positively related to the degree of cross-cultural adjustment, particularly sociocultural adjustment.

The result of correlation analysis indicated that Chinese international students' English self-confidence was significantly correlated with both psychological adjustment ($r = .36, p < .01$) and sociocultural adjustment ($r = .46, p < .01$).

Research Question 5: Predictors of Psychological Adjustment and Sociocultural Adjustment

Among the predictive variables of the current study, what are the possible predictors of psychological adjustment and sociocultural adjustment, respectively?

Hypothesis 5a: Acculturation strategy (*participation in the host society*), independent self-construal (e.g., *direct communication, autonomy*), interdependent self-construal (*harmony & conformity*), and *English self-confidence* will predict psychological adjustment among Chinese international students.

Hypothesis 5b: Acculturation strategy (*cultural maintenance and participation in the host society*), independent self-construal (e.g., *uniqueness + competition, direct communication, autonomy*), *perceived cultural distance*, and *English self-confidence* will predict sociocultural adjustment among Chinese international students.

Hypotheses 5a and 5b were modified from what I presented in the previous chapter due to the result of correlation analysis. I removed a few variables which I originally thought they would be predictors but they finally did not reveal significant correlations with the outcome variable. I added other variables as predictors according to the correlation analysis result which suggested they are potential predictors of the outcome variable. For instance, in the regression model of psychological adjustment, I removed *cultural maintenance* and *belonging + relatedness + sociability*, and I added *participation in the host society, direct communication, autonomy, harmony & conformity*, and *English self-confidence* as predictors. In the regression model of sociocultural adjustment, I added *cultural maintenance* as a predictor.

To test Hypotheses 5a and 5b, a series of hierarchical multiple regression analyses were conducted to examine the contribution of various predictive variables to psychological adjustment and sociocultural adjustment, respectively. Because participants differed in the length of the residence in the U.S., this variable was entered in the first step to account for any influence it might have on psychological and sociocultural adjustment.

For psychological adjustment, after *length of residence* was entered as the first step, *participation in the host society*, which is a dimension of acculturation strategy, was then entered in the second step. In the third step, three sub-dimensions of self-construals (i.e., *direct communication*, *autonomy*, *harmony & conformity*) were entered. Finally, English self-confidence was entered as the last step.

Table 26 shows the results of hierarchical regression analyses of the effects of all the predictive variables on psychological adjustment. In the first step, *length of residence* in the U.S. predicted a small amount of variation, $R^2 = .05$, $F(1, 167) = 7.93$, $p < .01$. In the second step, after *participation in the host society* was entered, the R^2 was increased to .07, $F(2, 166) = 5.97$, $p < .05$. In the third step, after the three sub-dimensions of self-construals were entered, the R^2 was largely increased to .20, $F(5, 163) = 8.28$, $p < .001$. In the last step, English self-confidence was entered, and the R^2 was increased to .22, $F(6, 162) = 7.69$, $p < .001$.

Throughout the four steps of regression analysis, I found that *the length of residence* in the U.S., two sub-dimensions (i.e., *direct communication*, *autonomy*) of independent self-construal, and *English self-confidence* were significant predictors of

psychological adjustment. None of the dimensions of acculturation strategy were found to be predictive of psychological adjustment. In addition, it is worthwhile to note that independent self-construal, rather than interdependent self-construal, was found to be significant predictors of psychological adjustment.

Table 26

Hierarchical Regression Analyses of Effects of Predictive Variables on Psychological Adjustment

Step	Independent Variables	R ²	ΔR ²	F	B	(se)B	β
1		.05	--	7.93**			
	Length of Residence				.00	.00	.21**
2		.07	.02	5.97**			
	Length of Residence				.00	.00	.20**
	Participation in the Host Society				.24	.12	.15*
3		.20	.13	8.28***			
	Length of Residence				.00	.00	.16*
	Participation in the Host Society				.12	.12	.07
	Independent SC:				.32	.08	.29***
	Direct Communication						
	Independent SC:				.24	.08	.21**
	Autonomy						
	Interdependent SC:				.06	.11	.04
	Harmony & Conformity						
4		.22	.02	7.69***			
	Length of Residence				.00	.00	.11
	Participation in the Host Society				.06	.12	.04
	Independent SC:				.27	.09	.24**
	Direct Communication						
	Independent SC:				.21	.08	.18*
	Autonomy						
	Interdependent SC:				.07	.11	.05
	Harmony & Conformity						
	English self-confidence				.15	.07	.17*

Note: * p < .05, ** p < .01, *** p < .001

For sociocultural adjustment, after *length of residence* was entered in the first step, the two dimensions of acculturation strategy (i.e., *cultural maintenance & participation in the host society*) were then entered in the second step. In the third step, three sub-dimensions of independent self-construals (i.e., *uniqueness + competition*, *direction communication*, and *autonomy*) were entered. In the fourth and fifth step, *perceived cultural distance* and *English self-confidence* were entered, respectively.

Table 27 shows the results of hierarchical regression analyses of the effects of all the predictive variables on sociocultural adjustment. In the first step, *length of residence* in the U.S. predicted a small amount of variation, $R^2 = .05$, $F(1, 167) = 9.34$, $p < .05$. In the second step, after the two dimensions of acculturation strategy (i.e., *cultural maintenance & participation in the host society*) were entered, the R^2 was increased to .10, $F(3, 165) = 5.92$, $p < .01$. In the third step, after the three sub-dimensions of independent self-construal were entered, the R^2 was increased to .15, $F(6, 162) = 5.86$, $p < .001$. In the fourth step, *perceived cultural distance* was entered, and it was found that $R^2 = .22$, $F(7, 161) = 7.60$, $p < .001$. In the last step, *English self-confidence* was entered, and it revealed that $R^2 = .33$, $F(8, 160) = 9.63$, $p < .001$.

Throughout the five steps of regression analysis, I concluded that the *length of residence* in the U.S., one sub-dimension of independent self-construal (i.e., *direct communication*), *perceived cultural distance*, and *English self-confidence* were significant predictors of sociocultural adjustment. None of the dimensions of acculturation strategy were showed as significant predictors of sociocultural adjustment.

Table 27

Hierarchical Regression Analyses of Effects of Predictive Variables on Sociocultural Adjustment

Step	Independent Variables	R ²	ΔR ²	F	B	(se)B	β
1		.05	--	9.34**			
	Length of Residence				.01	.00	.23**
2		.10	.05	5.92***			
	Length of Residence				.00	.00	.21**
	Cultural Maintenance				-.13	.10	-.11
	Participation in the Host Society				.24	.13	.15*
3		.18	.08	5.86***			
	Length of Residence				.00	.00	.18*
	Cultural Maintenance				-.15	.10	-.12
	Participation in the Host Society				.12	.12	.08
	Independent SC:				.14	.10	.10
	Uniqueness+ Competition						
	Independent SC:				.23	.08	.21**
	Direct Communication						
	Independent SC:				.06	.09	.06
	Autonomy						
4		.25	.07	7.60***			
	Length of Residence				.00	.00	.22**
	Cultural Maintenance				-.11	.09	-.09
	Participation in the Host Society				.14	.12	.09
	Independent SC:				.13	.10	.10
	Uniqueness+ Competition						
	Independent SC: Direct				.20	.08	.19*
	Communication				.10	.08	.09
	Independent SC: Autonomy				-.33	.08	-.27***
	Perceive Cultural Distance						
5		.33	.08	9.63***			
	Length of Residence				.00	.00	.11
	Cultural Maintenance				-.12	.09	-.10
	Participation in the Host Society				.02	.12	.01
	Independent SC:				.09	.09	.07
	Uniqueness+ Competition						
	Independent SC: Direct				.11	.08	.10
	Communication				.06	.07	.05

Independent SC: Autonomy	-.33	.08	-.27***
Perceive Cultural Distance			
English Self-Confidence	.29	.07	.34***

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Research Question 6: Moderating Effect of Perceived Cultural Distance

Does perceived cultural distance serve as a moderator in influencing the relation between acculturation strategies and cross-cultural adjustment among Chinese international students?

Hypothesis 6a: It is hypothesized that perceived cultural distance will moderate the relation between cultural maintenance and psychological adjustment. The stronger the perceived cultural distance is, the stronger the association between cultural maintenance and psychological adjustment will be.

Hypothesis 6b: It is hypothesized that perceived cultural distance will moderate the relation between participation in the host society and sociocultural adjustment. The stronger the perceived cultural distance is, the stronger the association between participation in the host society and sociocultural adjustment will be.

The product variable approach recommended by Baron and Kenny (1986) was used to examine the moderating effect of perceived cultural distance on the relation between acculturation strategies and cross-cultural adjustment. Three steps of multiple regression analyses were conducted to test Hypothesis 6a and 6b, respectively. The product variable, which was used to test the existence of interaction (i.e., the main idea of moderating effect), was a newly created variable derived through multiplying the independent variable and the moderator (for H6a: cultural maintenance \times perceived cultural distance; for H6b: participation in the host society \times perceived cultural distance).

Table 28 and Table 29 present the results of using multiple regression analysis to test the moderating effect of perceived cultural distance between acculturation strategies

and cross-cultural adjustment. The results did not show significant interaction effect among these regression analyses, thus the hypotheses regarding the moderating roles of perceived cultural distance between acculturation strategies and cross-cultural adjustment were not supported.

Table 28

Multiple Regression Analysis: Testing the Moderating Effect of Perceived Cultural Distance between Cultural Maintenance and Psychological Adjustment (Hypothesis 6a)

Step	Predictive Variable	Psychological Adjustment		
		B	(se)B	β
1	Cultural Maintenance (CM)	-.14	.10	-.11
2	Cultural Maintenance (CM)	-.14	.10	-.11
	Perceived Cultural Distance (PCD)	-.08	.10	-.06
3	Cultural Maintenance (CM)	-.88	.68	.20
	Perceived Cultural Distance (PCD)	-.75	.61	-.60
	CM \times PCD	.20	.18	.82

Note: * $p < .05$; ** $p < .01$, *** $p < .001$

Table 29

Multiple Regression Analysis: Testing the Moderating Effect of Perceived Cultural Distance between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 6b)

Step	Predictive Variable	Sociocultural Adjustment		
		B	(se)B	β
1	Participation in the Host Society (PHS)	.31	.11	.21**
2	Participation in the Host Society (PHS)	.31	.11	.21**
	Perceived Cultural Distance (PCD)	-.33	.09	-.27***
3	Participation in the Host Society (PHS)	.63	.90	.42
	Perceived Cultural Distance (PCD)	-.05	.82	-.04
	PHS \times PCD	-.09	.25	-.32

Note: * $p < .05$; ** $p < .01$, *** $p < .001$

Research Question 7: Mediating Effect of Self-Construal

Does self-construal serve as a mediator in influencing the relation between acculturation strategies and cross-cultural adjustment among Chinese international students?

Hypothesis 7: it is hypothesized that independent self-construal will mediate the relation between participation in the host society and sociocultural adjustment. Participation in the host society will influence sociocultural adjustment through independent self-construal.

To test hypothesis 7 regarding the mediating effect of independent self-construal on the relation between participation in the host society and sociocultural adjustment, I conducted a series of regression analysis, following the steps suggested by Baron and Kenny (1986). Online Sobel Test calculator for the significance of mediation was also applied to double check the existence of mediating effect. The results revealed that the original direct effect of participation in the host society on sociocultural adjustment ($\beta = .21, p < .01$) was greatly reduced (new $\beta = .15, p < .05$) when independent self-construal was included in the regression analysis. Sobel Test Statistics = 2.05, $p < .05$. It revealed that independent self-construal acted as a mediator in the relation between participation in the host society and sociocultural adjustment. Hypothesis 7 was thus supported (see Figure 13).

To further examine which sub-dimensions of independent self-construal had played strong mediating effects, I conducted three other sets of regression analyses to test the possible mediating effects of *uniqueness + competition*, *direct communication*, and

autonomy, respectively. The results showed significant mediating effects for the first two sub-dimensions (*uniqueness + competition*, *direct communication*) but not for the last one (*autonomy*) (See Figures 14 to 16).

Figure 13

Testing the Mediating Effect of Independent Self-Conceptual on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 7)

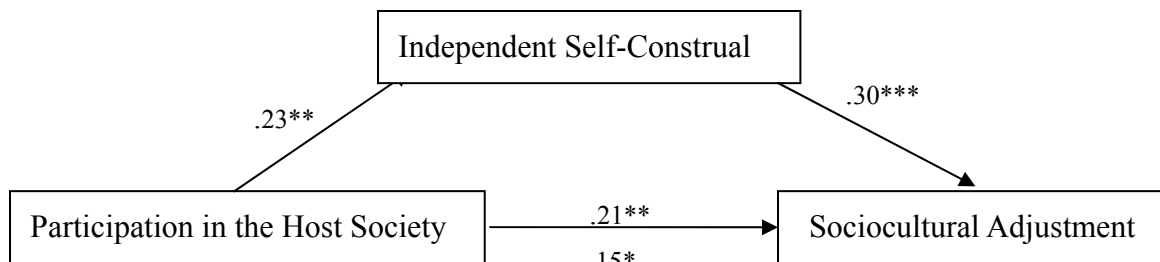


Figure 14

Testing the Mediating Effect of Uniqueness + Competition on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 7)

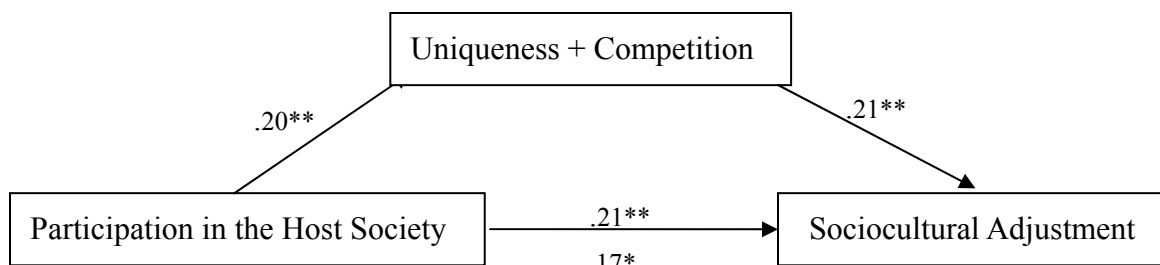


Figure 15

Testing the Mediating Effect of Direct Communication on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 7)

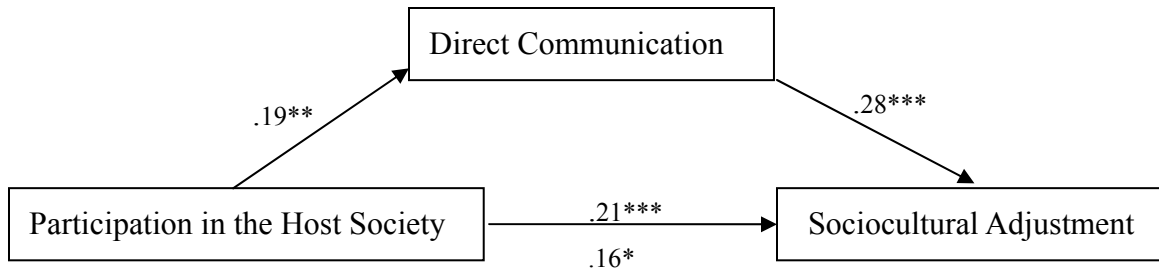
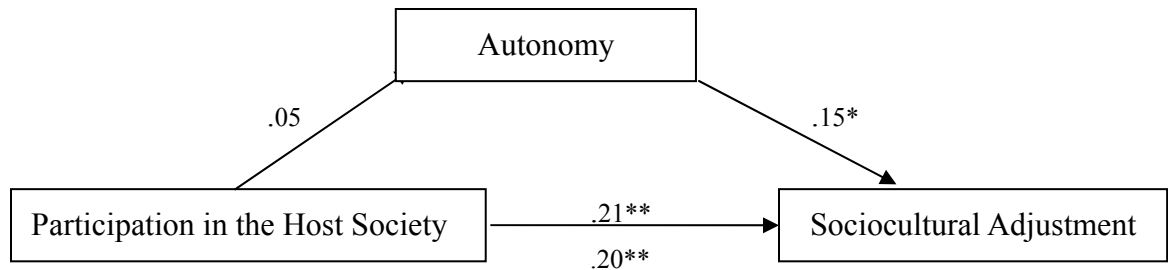


Figure 16

Testing the Mediating Effect of Autonomy on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 7)



Research Question 8: Mediating Effect of English Self-Confidence

What is the role of English self-confidence in influencing: a) the relation between acculturation strategies and cross-cultural adjustment, and b) the relation between

self-construals and cross-cultural adjustment? Does English self-confidence act as a mediator in influencing the relation between acculturation strategies and cross-cultural adjustment? Also, does English self-confidence act as a mediator in influencing the relation between self-construals and cross-cultural adjustment among Chinese international students?

Hypothesis 8a: It is hypothesized that English self-confidence will act as a mediator in the relation between acculturation strategies (particularly in reference with the dimension of participation in the host society) and sociocultural adjustment (*Figure 8*).

Hypothesis 8b: It is predicted that English self-confidence will act as a mediator in the relation between independent self-construal and sociocultural adjustment. (*Figure 9*)

Following the steps suggested by Baron and Kenny (1986), a series of regression analysis were conducted to test the mediating effect of English self-confidence on the relation between acculturation strategies and cross-cultural adjustment (Hypothesis 8a) and the relation between self-construals and cross-cultural adjustment (Hypothesis 8b).

The results revealed that the original direct effect of participation in the host society on sociocultural adjustment ($\beta = .21$, $p < .01$) was greatly reduced (new $\beta = .07$, no significance) when English self-confidence was included in the regression analysis. It revealed that English self-confidence acted as a mediator in the relation between participation in the host society and sociocultural adjustment. Hypothesis 8a was thus supported (see *Figure 17*).

Because there was a significant correlation between participation in the host society and psychological adjustment ($r = .21, p < .01$), it was suspected that English self-confidence might be a mediator in the relation between these two variables as well. Interestingly, the results showed that the original direct effect of participation in the host society on psychological adjustment ($\beta = .18, p < .05$) was greatly reduced (new $\beta = .07$, no significance) when English self-confidence was included in the regression analysis. It revealed that English self-confidence acted as a mediator in the relation between participation in the host society and psychological adjustment (see *Figure 18*).

Figure 17

Testing the Mediating Effect of English Self-Confidence on the Relation between Participation in the Host Society and Sociocultural Adjustment (Hypothesis 8a)

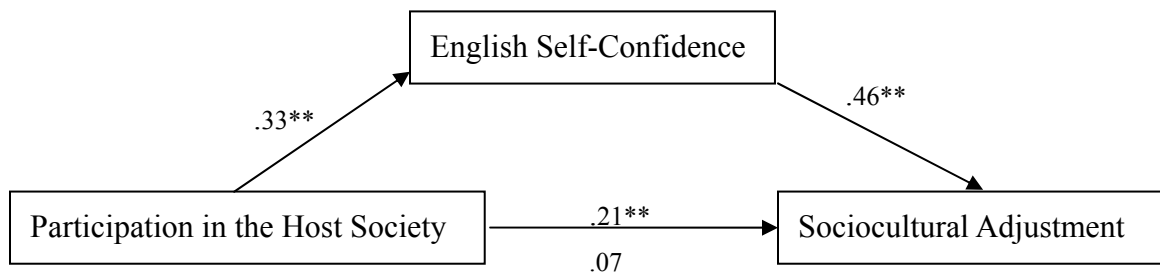
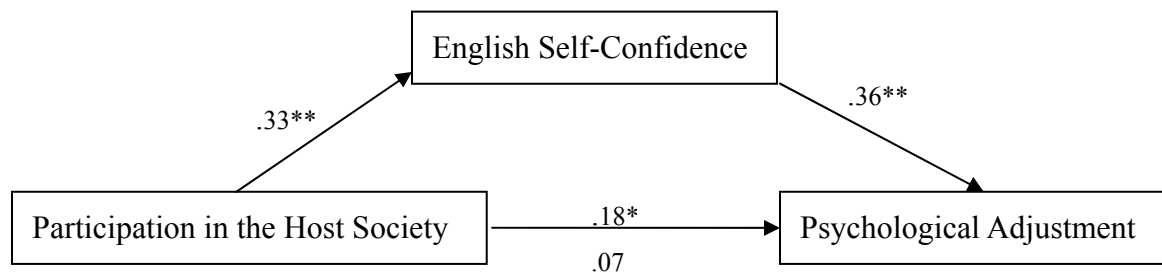


Figure 18

Testing the Mediating Effect of English Self-Confidence on the Relation between Participation in the Host Society and Psychological Adjustment (Hypothesis 8a)



To test Hypothesis 8b regarding the mediating role of English self-confidence in the relation between self-construals and cross-cultural adjustment, again, a series of regression analysis were conducted to test the existence of mediating effect. The result showed that the original direct effect of independent self-construal on sociocultural adjustment ($\beta = .30, p < .001$) was largely reduced (new $\beta = .15, p < .05$) when English self-confidence was included in the regression analysis. It indicated that English self-confidence acted as a mediator in the relation between independent self-construal and sociocultural adjustment (see *Figure 19*). To further test which sub-dimensions of independent self-construal were involved with such moderating relations, the three sub-dimensions were tested separately. The results showed that all of their associations with sociocultural adjustment were greatly reduced when English self-confidence was included in the regression model (See *Figures 20 - 22*).

Figure 19

Testing the Mediating Effect of English Self-Confidence on the Relation between Independent Self-Construal and Sociocultural Adjustment (Hypothesis 8b)

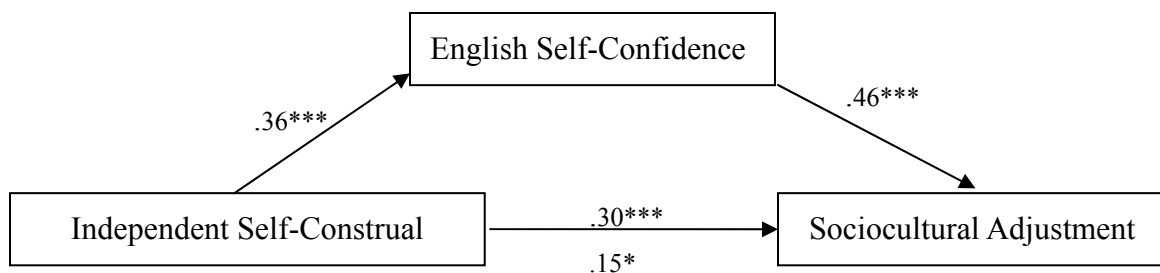


Figure 20

Testing the Mediating Effect of English Self-Confidence on the Relation between Uniqueness + Competition and Sociocultural Adjustment (Hypothesis 8b)

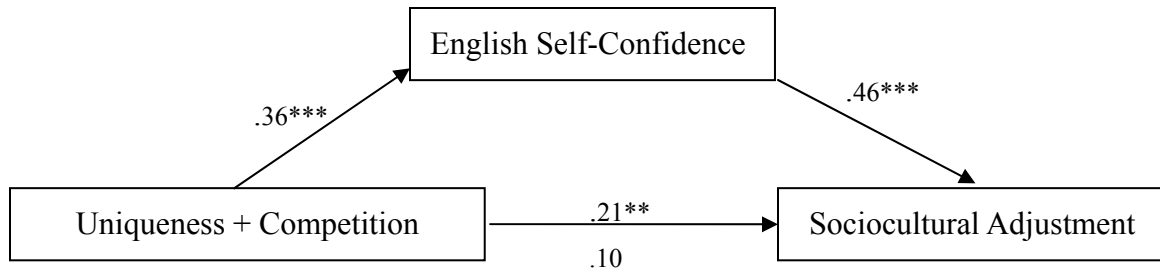


Figure 21

Testing the Mediating Effect of English Self-Confidence on the Relation between Direct Communication and Sociocultural Adjustment (Hypothesis 8b)

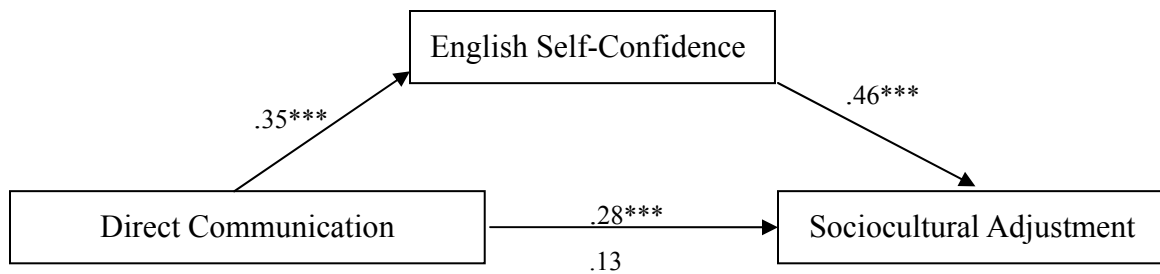
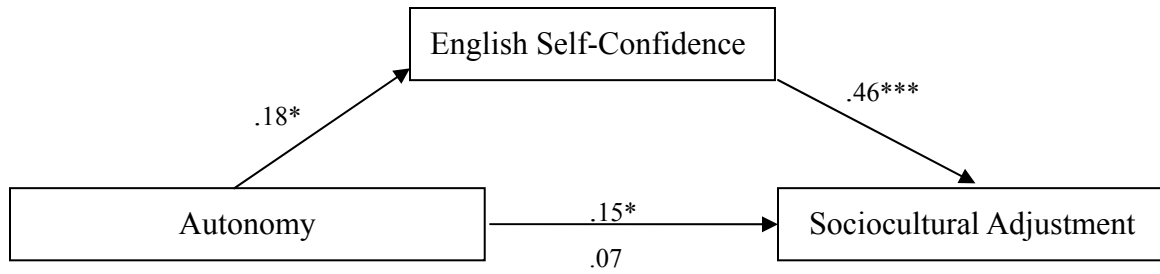


Figure 22

Testing the Mediating Effect of English Self-Confidence on the Relation between Autonomy and Sociocultural Adjustment (Hypothesis 8b)



V. DISCUSSION

The main goal of this study is to investigate the factors that might influence Chinese international students' cross-cultural adjustment in the United States. In particular, I focus on the roles of acculturation strategies, self-construals, perceived cultural distance, and English self-confidence. A few demographic variables have also been taken into consideration. I examined how these factors impact Chinese international students' psychological and sociocultural adjustment, and how these factors interact with each other as they generate impacts on the adjustment.

In this chapter, I will first discuss the most important findings of this study, and further compare and synthesize these findings with the published literature. Finally, I will discuss the limitations in this study, and recommend implications for future research and education practice.

Effects of Demographic Variables

Although the effects of demographic variables on cross-cultural adjustment were not specifically addressed in my research questions and hypotheses, it is worthwhile to note the effects from these demographic variables, as they impact the degree that international students adjust to a new cultural environment (Liu, 1985). Among all the demographic variables in the current study, I found that marital status and length of residence in the U.S. had significant influence on the cross-cultural adjustment among Chinese international students.

Marital status was found to have a slight influence on sociocultural adjustment. People who are married were found to have a better sociocultural adjustment than those who are single. Furthermore, people who are married and have children had a better sociocultural adjustment than those who are married and do not have children. This finding is consistent with a previous study (Maple, 1982) which found that marriage was related to social distance – married people had less social distance with American culture. Marriage enables and even forces individuals to gain practical abilities and become socially experienced, such that they would be able to deal with the practical issues and tasks they face in the process of establishing their own family. Interestingly, married people with children revealed a better sociocultural adjustment than those who were married but had not had children yet. This provides a support for the explanation that the challenges in marriages enable people to grow and to gain experiences that are helpful for their sociocultural adjustment in a different cultural environment. Having children also tends to force people to interact with others in their social world, such as daycare centers, parks, classes, and churches. Raising little children is definitely a great challenge for young Chinese parents who are international students in the United States, while it also contributes to the growth of social and cultural adaptation.

Marital status, however, was not found to have a significant influence on psychological adjustment among Chinese international students. According to the results of the current study, Chinese international students who were single and who were married did not differ in their psychological adjustment. This is in line with one of the previous studies (Liu, 1985) which found that marital status and depression were not

significantly correlated with each other among Chinese international students. Interestingly, although the link between marital status and depression was not found significant among Chinese international students, it was found significant among Japanese international students (Liu, 1985). In the current study, I target at international students of Chinese origin, but it will be certainly interesting to examine this link among different cultural groups for future studies.

Length of residence in the U.S. was found to have a strong association with both psychological adjustment ($r = .21, p < .01$) and sociocultural adjustment ($r = .23, p < .01$). The results of the regression analysis also showed that length of residence in the U.S. was a significant predictor for both dimensions of the cross-cultural adjustment. This finding is consistent with previous studies (Liu, 1985; Ward & Kennedy, 1993b; Wang & Mallinckrodt, 2006; Yang, Noels, & Saumure, 2006), which also found an increase in adjustment with greater time in the host country. As international students live longer in a cultural environment that is different from their original one, the length of time helps them to adjust to the new environment both psychologically and socioculturally. The longer they stay in the new cultural environment, the more they become used to the new cultural climate and cultural norms, thus the cultural shock or psychological impact decreases from what it was in the initial stage of arrival. They also become more socially and linguistically competent, as they accumulate more experience in tackling various daily tasks.

Acculturation Strategies and Cross-Cultural Adjustment

The first set of research hypotheses in the current study was concerning the relation between acculturation strategies and cross-cultural adjustment. There are two basic dimensions of acculturation strategies: *maintenance of the original cultural* and *participation in the host society* (Berry, 1980, 1990), and two dimensions of cross-cultural adjustment: *psychological* and *sociocultural* adjustment (Searle & Ward, 1990). One of the current research interests was to test the link between cultural maintenance and psychological adjustment, and the link between participation in the host society and sociocultural adjustment. The results of the current study did not support the hypothesis regarding the association between cultural maintenance and psychological adjustment, but the link between participation in the host society and sociocultural adjustment was supported ($r = .21, p < .01$).

Although the hypothesis concerning the association between cultural maintenance and psychological adjustment was not supported, this does not mean that maintenance of one's original culture has nothing to do with psychological adjustment. Previous studies suggested that, among international people, those who strongly identified with co-nationals (i.e., people from their original culture) experienced less psychological problems (Doná & Berry, 1994; Ward & Kennedy, 1994). Maintaining one's original culture helps to lessen psychological difficulties, such as depression, loneliness, a sense of isolation, and so forth. For Chinese international students, having Chinese style food is not only physically satisfying but also psychologically comforting. Also, having friends from the home country to talk in their first language and share similar issues and

challenges they face is a great source of emotional support. However, simply staying in the home-culture community and seeking emotional support is never enough for international students, because they came here for an essential purpose – to complete their studies and to obtain a degree. To achieve this goal, they are supposed to step out of the comfort zone and to take challenges from the host society. Thus, successfully participating in the U.S. society is definitely psychologically rewarding, and the effects might even exceed maintaining one's original culture. Perhaps that explains the reason why participation in the host society has a greater association with psychological adjustment ($r = .18, p < .05$) than cultural maintenance does in the current study.

Based on the two issues of acculturation strategies, four approaches were generated: Integration, Assimilation, Separation, and Marginalization (Berry, 1980 & 1990). Because the size of Marginalization group was too small in the current study ($N = 3$), it was disregarded and not included in the analysis. According to the hypotheses, I expected to see Integration would be the best approach for both psychological and sociocultural adjustment, as it represents a balance between maintenance of original culture and participation in the host society (Ward & Kennedy, 1994). However, the results went against the hypothesis. My analyses revealed that the Assimilation approach, rather than the Integration approach, was the best one for both psychological and sociocultural adjustment. Previous studies tend to support that the Integration approach was the best with respect to psychological adjustment (e.g., Doná & Berry, 1994; Kosic, 2006; Ward & Kennedy, 1994). Only one previous study (Neto et al. 2005) showed that Integration approach was not necessarily the best one for psychological adjustment. In

that case, Neto et al. (2005) studied a sample of Portuguese immigrants in Germany and found that the Integration and Separation approaches appear to be similarly effective for psychological adaptation. No previous studies were found that the Assimilation approach was the best for psychological adjustment. But in one study, Wang & Mallinckrodt (2006) examined a sample of Chinese/Taiwanese international students in the U.S. (which is similar to my study) and found that acculturation to the U.S. culture was helpful for the psychological adjustment. This is consistent with my study result. In conclusion, the relation between acculturation strategies and psychological adjustment may vary across different samples or different cultural contexts. With regard to sociocultural adjustment, previous studies showed that both the Integration approach (e.g., Neto et al. 2005; Ward & Kennedy, 1994) and Assimilation approaches (e.g., Kosic, 2006; Ward & Kennedy, 1994) were possibly the best strategies.

The other possible reason of the salient effect on cross-cultural adjustment from the Assimilation approach is that, the instrument of acculturation strategies used in the current study contains many items regarding language usage (five out of seventeen items were about language usage, including reading, writing, listening, speaking, and overall language usage). The Chinese international students in my sample tended to endorse that they spent much time using English here. That would enhance their score on participation in the host society and thus strengthen the effects of the Assimilation approach on their cross-cultural adjustment.

Interestingly, after adding length of residence in the U.S. and English self-confidence as covariates, the originally significant effects of acculturation strategy

types on cross-cultural adjustment were no longer salient. This finding suggests that length of residence in the U.S. and English self-confidence might mediate the relation between acculturation strategy types and cross-cultural adjustment and may be accounting for the association. This finding is essential as it supports another hypothesis regarding the mediating effect of English self-confidence between acculturation strategies and cross-cultural adjustment.

Self-Construals and Cross-Cultural Adjustment

The second set of research hypotheses in the current study was regarding the relation between self-construals and cross-cultural adjustment. First of all, I expected to see a strong positive association between interdependent self-construal and psychological adjustment, and between independent self-construal and sociocultural adjustment. The result of the correlation analysis, however, did not show a significant relation between the broad interdependent self-construal scale and psychological adjustment. When taking a closer look into the sub-scales of interdependent self-construal, only one of the sub-scales, *harmony & conformity*, was found to be significantly correlated with psychological adjustment ($r = .16, p < .05$). On the other hand, the correlation analysis result revealed a very strong association between the broad independent self-construal scale and sociocultural adjustment. When taking a closer look into the sub-scales of independent self-construal, all of the sub-scales (i.e., *uniqueness + competence*, *direct communication*, and *autonomy*) were significantly correlated with sociocultural adjustment. Another interesting finding was the strong association between independent self-construal and

psychological adjustment, which was not expected in my hypotheses (see Table 16). Overall, the result showed that independent self-construal, including the broad scale and all the sub-scales, had very strong associations with both psychological and sociocultural adjustment. However, the associations between interdependent self-construal and both dimensions of cross-cultural adjustment were very weak. This finding went against my hypothesis which anticipated a strong association between interdependent self-construal and psychological adjustment.

Self-Determination Theory (SDT; Ryan & Deci, 2000) may also help explain the impact of independent self-construal on cross-cultural adjustment. SDT acknowledges that, despite the variability in values and behaviors across different cultures, people from all cultures share some basic universal human needs. When these basic psychological needs are supported by the social contexts and are able to be fulfilled by individuals, well-being is enhanced. In a recent study conducted by Chirkov et al. (2003), their results supported the hypothesized relations between autonomy, one of the basic universal human needs, and well-being across four different cultural groups (South Korea, Russian, Turkey, and the United States). For Chinese international students with strong autonomous characteristics, it would be easier for them to well-being during the cross-cultural transition.

One of the main purposes of this study is to examine whether independent and interdependent self-construals would be equally important to Chinese international students' cross-cultural adjustment. Thus, I proposed hypotheses 2b and 2c. To test hypothesis 2b, I categorized all the participants into four categories according to the

degree of their independence-interdependence combination (i.e., high-high, high-low, low-high, and low-low) and expected to see that those who scored highly on both independence and interdependence would have the best cross-cultural adjustment. However, the result of analysis of variance did not support this hypothesis. Hypothesis 2c used a different way to test that if both independent and interdependent self-construals contributed to cross-cultural adjustment. I used regression analysis to test the effects of the sub-dimensions of self-construals on cross-cultural adjustment. The results showed that only sub-dimensions of independent self-construal (i.e., direct communication, autonomy) predicted cross-cultural adjustment, both psychological and sociocultural dimension (see Table 18 & Table 19).

However, these results did not aptly support my argument that independent and interdependent self-construals are equally important to Chinese international students' cross-cultural adjustment. In general, the results tended to show that all of the sub-dimensions of independent self-construal revealed very strong effects on cross-cultural adjustment, but the effects from interdependent self-construal were very weak. The results supported the traditional view that Asian students who are more independent have a better adjustment when they study in a western society. Previous studies which supported such a traditional view usually did not take sub-dimensions of independence and interdependence into consideration (e.g., Cross, 1995, Oguri & Gudykunst, 2003; Yamaguchi & Wiseman, 2001; Yang, Noels, & Saumure, 2006). Thus, they might have overlooked the effects from those sub-dimensions and the coexistence of independent and interdependent self-views. In my study, I intended to argue with such a

traditional view and their possible neglect of the sub-dimensions of independent and interdependent self-construals. As I mentioned in my literature review in Chapter 2, simply connecting independent self with individualist culture or simply connecting interdependent self with collectivist culture might be too simplified and problematic. Such dichotomous associations could not explain the widely inconsistent study results and has provoked arguments from many scholars (e.g., Kagitçibasi, 1994; Matsumoto, 1999; Oyserman et al., 2002) and thus resulted in efforts to enrich the notion regarding the sub-dimensions of the two self-construals (e.g., Kagitçibasi 1996, 2005; Schwartz, 1994; Suizzo, 2007).

In my current study, however, even though I have taken sub-dimensions of the two self-construals into consideration, the results did not support my argument that both independent and interdependent self-construals are equally important and contributive to international students' cross-cultural adjustment. One of the possible explanations for such a result is that international students are not necessarily representative of their home culture (Cross, 1995). It is possible that Chinese students who decide to study abroad hold a stronger independent self-construal than those who choose to stay in their home country. They might be more autonomous and more likely to use direct communication style when necessary, and these attributes are conducive to their adaptation in a western society.

The other possible explanation is the limitation of the instrument. I have made considerable efforts to consolidate the Self-Construal Scale used in this study, including reviewing and adopting items from various scales, composing a few items of my own,

and running factor analysis to decide which items to retain. The alpha coefficients also showed that both the independent and interdependent self-construal scales and majority of the sub-scales demonstrate a strong reliability. However, the Self-Construal Scale used in this study was not able to test across different contexts as all of the items are general statements. Overall, it is reasonable to expect the effects of independent self-construal on Chinese international students' cross-cultural adjustment, but there are also definitely some situations which require a strong interdependent self-construal. For example, when they do poorly on an exam or presentation, or when they feel homesick, or when they are approaching graduation and pondering their future career direction, their support usually comes from other Chinese international students who have similar issues or experience and are able to provide them with emotional support and appropriate advice. A strong interdependent self-construal enables a person to get connected with people, and that helps to relieve psychological stress in certain circumstances. Using vignettes/scenarios might be a good idea for future studies.

Perceived Cultural Distance and Cross-Cultural Adjustment

The third research hypothesis was concerning the association between perceived cultural distance and cross-cultural adjustment. Consistent with the hypothesis, I found there was a negative significant association between perceived cultural distance and sociocultural adjustment ($r = -.27, p < .01$). This result suggests that the higher one perceives the difference between one's original culture and the host culture, the more one will encounter various social difficulties. This is because higher perceived cultural

distance usually leads to higher difficulties in social integration (Redmond & Bunyi, 1993), less identification with the host culture, as well as less perceived social acceptance (Nesdale & Mak, 2003). Eventually, higher perceived cultural distance results in greater difficulties in sociocultural adjustment. With respect to psychological adjustment, it is possible that higher perceived cultural distance might negatively influence one's psychological adjustment. However, the result did not reveal a significant correlation between perceived cultural distance and psychological adjustment. This finding implies that high perceived cultural distance has a stronger and more direct impact on one's sociocultural adjustment than on the psychological adjustment.

English Self-Confidence and Cross-Cultural Adjustment

The fourth research question was on the topic of the relation between English self-confidence and cross-cultural adjustment. As expected, the results showed that English self-confidence had a significant association with Chinese international students' psychological adjustment ($r = .36, p < .01$) as well as the sociocultural adjustment ($r = .46, p < .01$). This means that the more self-confident one is in using English, which is a foreign language and a second language for Chinese international students, the better he or she is able to adapt into the U.S. culture. The finding is in line with previous studies (e.g., Duru & Poyrazli, 2007; Noels, Pon, & Clément, 1996; Yeh & Inose, 2003). English proficiency and self-confidence directly influence Chinese international students' sociocultural adjustment in the U.S., as higher confidence in using the second language enables one to practice more in various settings and thus enhances their language fluency,

proficiency, and communication effectiveness. Essentially, high language self-confidence facilitates the efficacy in dealing with a variety of daily tasks and enables one to successfully adapt him/herself to the new cultural environment.

On the other hand, it is interesting to find the significant relation between English self-confidence and psychological adjustment as well. Higher self-confidence in using English relates to lower language anxiety and less frustration when using English. When one is able to effectually use the second language to communicate with others, to deal with various issues, and to solve problems in the host society, this is definitely psychologically rewarding. These findings are in line with previous studies which suggested that language self-confidence is associated not only with sociocultural adjustment, but also with psychological adjustment (Noels, Pon, & Clément, 1996; Yang, Noels, & Saumure, 2006).

Predictors of Psychological and Sociocultural Adjustment

Ward and her colleagues (e.g., Ward & Searle, 1991; Ward & Kennedy, 1992) proposed that different factors contribute differentially to psychological and sociocultural adjustment. The result of the current study showed that length of residence in the U.S., participation in the host society (one dimension of acculturation strategies), direct communication, autonomy (sub-dimensions of independent self-construal), English self-confidence were predictive of psychological adjustment. On the other hand, length of residence, participation in the host society, direct communication (a sub-dimension of independent self-construal), perceived cultural distance, and English self-confidence were

predictive of sociocultural adjustment. According to my study result, autonomy (which was predictive of psychological adjustment but not of sociocultural adjustment), and perceived cultural distance (which was predictive of sociocultural adjustment but not of psychological adjustment) were revealed to be distinctive predictors between the two dimensions of cross-cultural adjustment. It was out of expectation to see that autonomy was predictive of psychological adjustment but not of sociocultural adjustment. Perceived cultural distance was revealed to be a predictor of sociocultural adjustment but not of psychological adjustment, which was in line with the prediction. The result confirms that cross-cultural is a multifaceted model (Ward & Kennedy, 1993b).

The Moderating Effect of Perceived Cultural Distance between Acculturation

Strategies and Cross-Cultural Adjustment

In hypotheses 6a & 6b, I predicted that perceived cultural distance would moderate the relation between acculturation strategies and cross-cultural adjustment. However, the study result did not support my hypothesis. One of the possible explanations was that all of my participants were Chinese international students, and their perceived cultural distance between the Chinese culture and American culture may not differ that much as they came from the similar cultural background. Previous studies which found the moderating effect of cultural distance on cross-cultural adjustment (e.g., Waxin, 2004; Stahl & Caligiuri, 2005) had their samples with participants from different cultural background, and thus were able to make the moderating effect of cultural distance salient.

The Mediating Effect of Self-Construals between Acculturation Strategies and Cross-Cultural Adjustment

The seventh research question was designed to test if self-construals act as a mediator in the relation between Chinese international students' acculturation strategies and their cross-cultural adjustment. This is somewhat a new and exploratory hypothesis, as no previous studies have been found which tested the possible mediating roles of self-construals in influencing the association between acculturation strategies and cross-cultural adjustment. The results revealed that independent self-construal acted as a mediator in the relation between Chinese international students' participation in the U.S. society and their sociocultural adjustment. It indicated that high involvement in the U.S. culture and frequent intercultural contact would strengthen Chinese students' independent self-construal, which in turn facilitates their sociocultural adaptation. As a result, independent self-construal might become a more direct and stronger factor of sociocultural adjustment than the employed acculturation strategy (participation in the host society).

When taking a closer look into the sub-dimensions of independent self-construal, I found that two of the sub-dimensions, *uniqueness + competition* and *direct communication*, were revealed to be strong mediators in the relation between participation-in-the-host-society strategy and sociocultural adjustment among Chinese international students. The third sub-dimension, *autonomy*, however, was not found as a mediator in that relation. It is interesting to find the mediating effects of the two sub-dimensions: *uniqueness + competition* and *direct communication*. Being unique and

competitive is usually valued in a western society such as the United States, thus frequent involvement in the U.S. society would reinforce Chinese students' values on being unique and competitive. Such reinforcement on uniqueness and competitiveness would contribute to Chinese students' social and cultural adjustment in the U.S. as it helps them to act in a socially desirable way. *Direct communication* is another crucial sub-dimension of independent self-construal, and it is also interesting to find it a mediator in the relation between participation in the host society and sociocultural adjustment. The styles individuals use to communicate vary across cultures and within cultures (Gudykunst et al., 1996). Hall (1976) proposed a differentiation between low- and high-context communication. Low-context communication involves the use of explicit and direct expressions, while high-context communication, in contrast, involves the use of implicit and indirect messages. Hall argues that people in a culture use both low- and high-context communication, but one tends to be predominant. Gudykunst and Ting-Toomey (1988) argued that low-context communication is used predominantly in individualistic cultures, whereas high-context communication is used predominantly in collectivistic cultures. It implies that Chinese international students who tend to use low-context communication style (i.e., direct communication) are able to adjust themselves better in the U.S. society, as it is a predominant communication style in the U.S. sociocultural context. It also helps to explain why direct communication revealed as a mediator in the association between Chinese international students' participation in the U.S. society and their sociocultural adjustment.

Finally, the third sub-dimension of independent self-construal, *autonomy*, did not

reveal a significant mediating effect. Autonomy is normally highly valued in the U.S. society as well as the other two sub-dimensions. Kagitçibasi (2005) even argued that autonomy is a universal basic human need, regardless of western or non-western cultures. There are two possible explanations for the absence of mediating effect of autonomy. The first explanation is in line with the argument of Kagitçibasi. Because autonomy is a universal basic human need shared by both westerners and non-westerners, frequent participation in the U.S. society would not particularly enhance Chinese international students' autonomous characteristic, as they already possess that characteristic. Another explanation is the flaw of the instrument. The autonomy sub-scale employed in the current study only has three items with a low reliability ($\alpha = .49$), and thus it might decrease the potential mediating effect of autonomy.

The Mediating Effect of English Self-Confidence between Acculturation Strategies and Cross-Cultural Adjustment

The final set of the research questions was concerning the mediating effect of English self-confidence on the relation between acculturation strategies and cross-cultural adjustment. In line with the hypotheses, the regression analysis results indicated that English self-confidence mediated the relation between participation in the host society and sociocultural adjustment. The direct effect of participation in the host society on sociocultural adjustment ($\beta = .21, p < .01$) was reduced when English self-confidence was included in the regression analysis ($\beta = .07$, no significance). In addition, the regression analysis result also revealed that English self-confidence mediated the relation between

participation in the host society and psychological adjustment. The direct effect of participation in the host society on psychological adjustment ($\beta = .18$, $p < .05$) was reduced when English self-confidence was included in the regression analysis ($\beta = .07$, no significance).

Participation in the U.S. society has a strong impact on Chinese international students' cross-cultural adjustment, both socioculturally and psychologically. The frequency and quality of the contact with people in the host society (the U.S.) is directly related to their sociocultural adaptation (Noels, Pon, & Clément, 1996). More interaction with American friends and higher involvement in cross-cultural activities in a non-threatening environment are beneficial for Chinese international students' sociocultural adjustment. As they become more acquainted with and more used to the new cultural norm, such as the life style and the communication style, they will be able to act in a socially appropriate way with less uneasiness. At the same time, the difficulties concerning psychological aspect, such as worries, anxiety, depression, a sense of failure or incompetence will be lessened. Instead, a sense of achievement and happiness comes along will benefit their psychological well-being.

It is interesting to see the language variable plays a mediating role in the relation between Chinese international students' participation in the U.S. culture and their cross-cultural adjustment. This finding indicates that confidence in using the second language (English) had a more direct impact than host cultural participation on the cross-cultural adjustment, as it replaced the effect of participation in the U.S. culture. This is consistent with previous findings (e.g., Dao, Lee, & Chang, 2007; Noels, Pon, &

Clément, 1996) which showed that perceived English fluency can mediate the association between intercultural contact and cross-cultural adjustment among Chinese/Taiwanese international students who study in the U.S. In fact, using English is an important aspect of participation in the U.S. culture, because English is the primary language in the U.S. society. Language ability is such a strong mechanism; the ability of self-expression and communicative effectiveness directly impact their cross-cultural adjustment. Especially in the case that English is a second language for Chinese international students and is greatly different from their native language (Chinese) in terms of syntax (grammar and sentence structure) and phonology (intonation and pronunciation), it is definitely more challenging for them to learn and to use it well. Once they are able to use English comfortably, they are also more able to actively participate in the U.S. society, and therefore results in a better cross-cultural adjustment.

In addition, Schumann's (1978) model may help explain the relationships among English self-confidence, participation in the host society, and cross-cultural adjustment. Schumann proposed the concept of "psychological distance" and "social distance" in second language learning. Psychological distance refers to the degree of individual receptiveness to second language learning. A variety of individual traits may influence one's psychological distance when learning a second language, such as motivation, attitudes toward the new culture and language, and language anxiety. Social distance, on the other hand, refers to the degree of receptiveness of the target group (the American campus or the larger U.S. society in this case) to the learning group (Chinese international students). A low psychological distance is conducive to the enhancement of

English self-confidence, and a low social distance will encourage Chinese international students' participation in the U.S. society. Overall, the U.S. campus in this study is very friendly with international students from various countries, signifying a low social distance. As long as Chinese students are able to overcome their psychological distance in learning and speaking English, their degree of cross-cultural adjustment will be optimistically improved.

The Mediating Effect of English Self-Confidence between Self-Construals and Cross-Cultural Adjustment

Finally, the hypothesis regarding the mediating effect of English self-confidence on the relation between self-construals and cross-cultural adjustment is an exploratory hypothesis. The proposal of this hypothesis was inspired by previous studies which showed that independent self-construal directly predicted English-self confidence (e.g., Yamaguchi & Wiseman, 2001; Yang et al., 2006), and English self-confidence was found that it predicted cross-cultural adjustment. Thus, I proposed that English self-confidence might be a mediator between independent self-construal and sociocultural adjustment. Interestingly, the result of the current study supported this hypothesis. The direct impact of independent self-construal on sociocultural adjustment ($\beta = .30, p < .001$) was greatly reduced after English self-confidence was included in the regression model (new $\beta = .15, p < .05$). When taking a closer look into the three sub-dimensions of independent self-construal (i.e., *uniqueness + competition, direct communication, autonomy*), I found that English self-confidence mediated the relation between each of the sub-dimensions of

independent self-construal and sociocultural adjustment. Again, this result indicated the pivotal role of English usage. The confidence in using the second language (English) had a more direct impact than independent self-construal on sociocultural adjustment, as it replaced the effect of independent self-construal on adjustment.

Limitations of the Current Study and Implications for Future Studies

There are a few limitations in the current study and require future efforts. First of all, the instrument used to measure acculturation strategy encompasses many items about English language usage. Among the seventeen items, five of them are regarding language usage, including reading, writing, listening, speaking, and overall English usage. This more or less caused an imbalance in terms of various aspects of acculturation strategy, as host language usage is only one aspect of acculturation strategy. Overall, the participants of my study tended to endorse that they spent much time using English and made considerable efforts to improve their English. As a result, it might enhance their scores on the participation in the host society scale. The acculturation strategy scale used in the current study was modified from the Acculturation Index (AI; Ward, 1999). The original version of AI consists of 21 cognitive and behavioral items (e.g., food, recreational activities, language, world view, social customs). I dropped some items because of confusion or inadequacy (e.g., general knowledge, political ideology, worldview), and added a few additional items (i.e., roommate choice, language usage – reading, writing, listening, speaking, and overall usage). For future studies, I suggest researchers reexamine the items used on the acculturation strategy scale and ensure that the items

well cover a variety of aspects of acculturation strategy, with balanced number of items for various aspects.

With respect to the dimensions of acculturation strategy, John Berry (1980, 1990) proposed two basic issues, heritage cultural maintenance and participation in the host society, in his acculturation model. Is it possible there are dimensions other than these two? Chinese international students who choose to be involved with a mixed international student group usually find such a group contains international students from their own or other cultural backgrounds, and some American friends who love an international environment. Such a mixed international community is an English-speaking while less threatening environment. Perhaps it can be regarded as a new dimension between heritage cultural maintenance and participation in the host society, or it can be regarded as an integration approach within the original acculturation model. Future researchers may take this issue into consideration.

Secondly, the Self-Construal Scale used in the current study was a newly created scale. Items were obtained from various self-construal scales, and a few of the items were written by myself. In the initial stage of data analysis, I used factor analysis to retain appropriate items and to refine the whole independent and interdependent self-construal scales as well as all the sub-scales. This is a worthwhile attempt and a contribution of this study. However, the newly created Self-Construal Scale still has its limitations. One of the limitations is the low reliabilities of *autonomy* sub-scale and *harmony & conformity* sub-scale. Both of them are consisted of only three items. For future studies, I suggest researchers to add a few more items on both sub-scales to reach better reliabilities. In

addition, the Self-Construal Scale was not able to test participants' responses across different contexts. Researchers may consider using vignettes or scenarios as an alternative method to test individuals' self-construals. One of the advantages of using vignettes is to test participants' responses across different contexts by putting them into real-world situations and ask them to imagine what they would do in such real situations (c.f., Liem, Lim, & Liem, 2000; Triandis, Chen, & Chan, 1998).

In addition, the current study is a purely quantitative study. All the data collection and data analyses were quantitative research methods. It would be interesting and informative if researchers can use in-depth or semi-structured interviews and collect a few qualitative data. For instance, researchers can ask questions about acculturation strategies that international students use and the reasons why they choose to use that strategy. Using vignettes to test self-construals, as what I mentioned in the last paragraph, could be integrated into part of the interview. Other good questions include the strategies they use to improve their English, or the difficulties they have for psychological and sociocultural adjustment and how they overcome such difficulties. In addition to using interviews, conducting a focus group is also a good method to collect qualitative data. Researchers may consider gathering six to eight Chinese international students, including different background from mainland China, Taiwan, and Hong Kong, and instructing and encouraging them to share their cross-cultural adjustment experience at a deep level in a small group setting. These qualitative data would be valuable and would be able to enrich the whole study.

Another possible limitation of the study is the lack of Chinese translations of the

instruments. Because all of the participants were Chinese international students who currently enrolled in a prestigious U.S. university, I assumed that their English proficiency has reached a certain level and would be feeling comfortable reading English questionnaires, as the items were not written in difficult English. However, I might have overlooked the fact that the range of English proficiency level among Chinese international students is actually very wide, depending on their length of residency in the U.S., the magnitude of their motivation to learn English well, the efforts they invest in improving their English, etc. This might have subtly influenced the validity of the questionnaires. Ideally, using the first language to answer the questionnaires would reduce the errors generated during the data collection process. I suggest researchers to translate instruments into the first language of the target group when conducting studies about cross-cultural adjustment. In this case, it would be ideal if all the questionnaires were carefully translated into Chinese. To be even more thoughtful, researchers may consider preparing different versions of questionnaires – traditional Chinese version for those who come from Taiwan and Hong Kong, and simplified Chinese version for those who come from mainland China. This would make participants feel easy and comfortable when they read and answer the questionnaires.

Finally, I suggest researchers for future studies to take a few more other factors into consideration. For example, researchers might want to investigate international students' intention to stay in the U.S. or to go back to their home country after they complete their study. This might influence their acculturation strategy and further affect their cross-cultural adjustment. For those who plan to stay in the U.S., they may choose

to invest more time and energy in engaging in activities of the host society. For those who plan to go back to their home country, they may spend relatively less time and energy becoming “Americanized”; instead, they may choose to invest more time and energy in maintaining a close connection with their home cultural community.

Conclusion

The result of this study suggests that the Assimilation approach served as the best acculturation strategy for Chinese international students who study in the U.S. When it is unlikely for individuals to maintain high involvement in both the heritage and the host cultural communities because of limited time and energy, having more contact with host nationals is probably better than staying only in one’s own cultural community, especially for one’s sociocultural adjustment. Indeed, when one’s time and energy is limited and thus makes the Integration approach less feasible, it is necessary to compromise and to prioritize different acculturation strategies.

Self-construal is another significant research interest of this study. What kind of self-view (i.e., Independence or Interdependence) is better for Chinese international students’ cross-cultural adjustment when they study in a western society? The majority of the previous studies supported the traditional view that Asian students who hold a stronger independent self-view have better cross-cultural adjustment in a western society. I argued that researchers overlooked the sub-dimensions of independent and interdependent self-construals in previous studies and were thus unable to support the new perspective that both independent and interdependent self-views are equally

important. As Kagitçibasi (1996, 2005) argues, both autonomy (a dimension of Independence) and relatedness (a dimension of Interdependence) are universal human needs. Her theories suggested that individuals with autonomous-related selves may adapt themselves the best in a new cultural environment. However, in my study, even though I have carefully taken sub-dimensions of independence and interdependence into my research analysis, the result was still inclined to support the traditional view. This leaves the divergence of the traditional and the new perspectives an unsolved problem. Future researchers should further investigate this controversy.

There are a few interesting new findings with respect to self-construals in this study. First, I found that independent self-construal mediated the relation between Chinese international students' participation in the U.S. society and their sociocultural adjustment. Frequent contact and involvement with American culture may strengthen their independent self-construal, especially in the sub-dimensions of uniqueness, competition, and direct communication. These independent self-views will generate a more direct impact on their sociocultural adaptation in the end. Second, I found that English self-confidence acted as a mediator in the relation between independent self-construal and sociocultural adjustment. These new findings are intriguing to researchers who are interested in communicative competence/confidence/style and their impacts on individuals' cross-cultural adaptation. The results of this study indicated that both direct communication style and English self-confidence are very strong predictors of Chinese international students' cross-cultural adjustment when they study in the U.S. society.

This study also provides implications for international students' psychological well-being in the counseling field. How could university counselors help international students to better adapt themselves, into the host society? Since participation in the host society was revealed to be a crucial factor and an important dimension of acculturation strategy which influences international students' cross-cultural adjustment, university counselors could encourage international students to step out of their own cultural community and bravely get connected with people in the host cultural community. In addition, universities could offer ESL (English as a Second Language) programs for those who have the need to improve their language ability.

APPENDICES

Appendix A: Background Information

1. Your gender: ☐ Male ☐ Female
2. Date of birth: / / (mm/dd/yyyy)
3. Are you currently an undergraduate or graduate student?
☐ Undergraduate (☐ 1st year ☐ 2nd year ☐ 3rd year ☐ 4th year ☐ 5th year or more)
☐ Graduate (☐ Master's ☐ Doctoral ☐ Postdoctoral)
4. Your major:
5. When did you arrive in the U.S. to pursue your studies? / (mm/yyyy)
6. Did you have any experience living in the U.S. or any other English-speaking country before you came to the U.S. to pursue your studies? ☐ Yes ☐ No
If Yes, how long had you been living in the U.S. before? years and months
How old were you at that time? years old.
7. Has either of your parents ever lived in an English-speaking country?
☐ Yes (Dad or Mom, please circle one or both) ☐ No
8. Where do you come from? (Please specify the name of the city/province, and the country)
9. Do you have a faith or religion? ☐ No ☐ Not sure ☐ Yes (Name of religion:)
10. If Yes, how important is your faith or religion to you? ☐ Very important
☐ Somewhat important ☐ Average ☐ Not very important
11. Your marital status: ☐ Single ☐ Engaged ☐ Married / no children
☐ Married / with children (ages of children:) ☐ Divorced
☐ Widowed ☐ Other ()
12. If you are married, is your spouse with you?
☐ Yes, you both are in the same city.
☐ No, your spouse is in another city/state in the U.S.
☐ No, your spouse stays in your original country.
☐ Other ()

13. What is the approximate percentage of students from your country studying in your academic department? ☐ More than 80% ☐ Between 50% and 80%
☐ Between 20% and 50% ☐ Less than 20%
14. Is English your first language? ☐ Yes ☐ No
15. If English is NOT your first language, please specify your first language: _____
16. How would you rate your overall English proficiency? ☐ Low ☐ Average
☐ Good ☐ Excellent ☐ Native speaker
17. What are the three recreational activities that you do most often here in the U.S.?

18. Your email address: _____

Appendix B: Acculturation Index

Directions: This section is concerned with how you view yourself in relation to typical members of your own culture and to the typical Americans. You are asked to consider two questions about your current life style:

- Are your experiences and behaviors similar to those of typical people from your culture of origin?
- Are your experiences and behaviors similar to those of typical Americans?

For each statement, please indicate the degree of your agreement using a 5-point scale.
1= Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree.

1. Dressing style

- I maintain a dressing style of my own culture. 1 2 3 4 5
- My dressing style is somewhat Americanized. 1 2 3 4 5

2. Food

- I maintain an eating style of my own culture. 1 2 3 4 5
- My eating style is somewhat Americanized. 1 2 3 4 5

3. Living community (e.g., Apartment complex)

- I live in a community where there are a lot of people of my own cultural background. 1 2 3 4 5
- I live in a community where residents are mainly Americans. 1 2 3 4 5

4. Roommate choice (If you have/had a roommate)

- I choose to live with someone from my own culture. 1 2 3 4 5
- I choose to live with someone who is an English speaker or someone I can practice English. 1 2 3 4 5

5. Recreational activities

- I maintain recreational activities of my own culture. 1 2 3 4 5
- My recreational activities are somewhat Americanized. 1 2 3 4 5

6. Friendship network
 - I maintain a good friendship network with people from my own culture. 1 2 3 4 5
 - I have many American friends or friends from different cultural background. 1 2 3 4 5
7. Pace of life
 - I maintain a pace of life which is similar to peers in my home country. 1 2 3 4 5
 - My pace of life is similar to my American peers. 1 2 3 4 5
8. Reading
 - I spend a lot of time reading in my own language (e.g., online readings, emails, novels). 1 2 3 4 5
 - I spend a lot of time reading in English (e.g., academic papers, textbooks). 1 2 3 4 5
9. Writing
 - I spend a lot of time writing in my own language (e.g., emails, journaling). 1 2 3 4 5
 - I spend a lot of time writing in English. 1 2 3 4 5
10. Speaking
 - I spend a lot of time speaking in my own language. 1 2 3 4 5
 - I spend a lot of time speaking in English. 1 2 3 4 5
11. Listening
 - I spend a lot of time listening to my own language. 1 2 3 4 5
 - I spend a lot of time listening to English. 1 2 3 4 5
12. Overall language usage
 - I spend a lot of time using my own language. 1 2 3 4 5
 - I make efforts to increase my opportunities to use English. 1 2 3 4 5
13. Communication style
 - My communication style is similar to people from my own culture. 1 2 3 4 5
 - My communication style is similar to American style (e.g., more direct). 1 2 3 4 5

14. Religious beliefs (if you have any)

- My religious belief is similar to that of people from my own culture. 1 2 3 4 5
- My religious belief is similar to that of most Americans. 1 2 3 4 5

15. Church attendance (if you are attending a church)

- I choose to attend a church of my own culture (e.g., Chinese church/Korean church). 1 2 3 4 5
- I choose to attend an American church. 1 2 3 4 5

16. Values

- I maintain values of my own culture. 1 2 3 4 5
- My values are somewhat Americanized. 1 2 3 4 5

17. Social activities

- I like to attend social activities held by my cultural group. 1 2 3 4 5
- I like to attend social activities held by American or international groups. 1 2 3 4 5

Appendix C: Self-Construal Scale

Directions: The statements on this scale describe your self-understanding in terms of how you view yourself in relation to others in general. For each statement, please circle the degree of your agreement using a 5-point scale.

1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree.

1. Having a lively imagination is important to me. 1 2 3 4 5
2. I often have the feeling that my relationships with others are more important than my own accomplishments. 1 2 3 4 5
3. I'd rather say "No" directly, than risk being misunderstood. 1 2 3 4 5
4. It is important for me to have a considerable degree of social life. 1 2 3 4 5
5. I enjoy being unique and different from others in many aspects. 1 2 3 4 5
6. The security of being an accepted member of a group is very important to me. 1 2 3 4 5
7. I expect myself to be a competitive person in my academic field. 1 2 3 4 5
8. I am careful to maintain harmony in my group. 1 2 3 4 5
9. Being able to take care of myself is a primary concern for me. 1 2 3 4 5
10. When I think of myself, I often think of my friends or my family. 1 2 3 4 5
11. I prefer to be direct and forthright when dealing with people I've just met. 1 2 3 4 5
12. I like to share little things with my friends. 1 2 3 4 5
13. I enjoy being admired for my unique qualities. 1 2 3 4 5
14. It is important for me to have a sense of belonging in my academic department. 1 2 3 4 5
15. I tend to compete with others when I'm involved with a group project. 1 2 3 4 5
16. When I'm with my group, I watch my words so I won't offend anyone. 1 2 3 4 5
17. I prefer to be self-reliant rather than dependent upon others. 1 2 3 4 5
18. My relationships with others are important to my sense of what kind of person I am. 1 2 3 4 5
19. Speaking up during a class is not a problem for me. 1 2 3 4 5

20. I always make efforts to interact with others properly. 1 2 3 4 5
21. Having my personal identity independent of others is very important to
me. 1 2 3 4 5
22. I want to belong to a certain group or organization. 1 2 3 4 5
23. I always do my best when I compete with others. 1 2 3 4 5
24. I have respect for the authority figures with whom I interact. 1 2 3 4 5
25. Whenever I set a goal for myself, I usually highly focus on it and do my best to
achieve the goal. 1 2 3 4 5
26. It is important for me to feel connected to my campus life. 1 2 3 4 5
27. I always state my opinions very clearly. 1 2 3 4 5
28. I make efforts to enhance my social skills. 1 2 3 4 5
29. It is important for me to keep my uniqueness when I am in group. ... 1 2 3 4 5
30. I enjoy being a part of a group or organization. 1 2 3 4 5
31. It is important to me that I perform better than others on a task. 1 2 3 4 5
32. It is important for me to respect decisions made by the group. 1 2 3 4 5
33. It is important to me that I have autonomy over my own life. 1 2 3 4 5
34. Most of the time I enjoy engaging in group activities than solitary
activities. 1 2 3 4 5
35. I usually express my thoughts directly when I communicate with
others. 1 2 3 4 5
36. I seriously take my parents' advice into consideration when making important life
decisions. 1 2 3 4 5
37. I voice my own opinion in group discussions. 1 2 3 4 5
38. I will stay in a group if they need me, even when I'm not happy with the
group. 1 2 3 4 5

Appendix D: Perceived Cultural Distance Scale

Directions: Based on your personal experiences, please indicate the degree of difference between your own culture or country and the U.S. culture in each of these areas. Use the following 1 to 5 scale:

1 = no difference; 2 = slight difference; 3 = moderate difference; 4 = great difference; 5 = extreme difference.

- | | | | | | |
|--|---|---|---|---|---|
| 1. Climate (such as the temperature and the rainfall). | 1 | 2 | 3 | 4 | 5 |
| 2. Physical environment (such as the neighborhood, the density of
population). | 1 | 2 | 3 | 4 | 5 |
| 3. Transportation tool or style. | 1 | 2 | 3 | 4 | 5 |
| 4. Food (the cooking and eating style). | 1 | 2 | 3 | 4 | 5 |
| 5. Clothes (the dressing style). | 1 | 2 | 3 | 4 | 5 |
| 6. The types of leisure activities. | 1 | 2 | 3 | 4 | 5 |
| 7. Pace of life. | 1 | 2 | 3 | 4 | 5 |
| 8. Material comfort (Standard of living). | 1 | 2 | 3 | 4 | 5 |
| 9. Language (the languages used in your country and in the U.S.). | 1 | 2 | 3 | 4 | 5 |
| 10. Communication style (such as directness or indirectness). | 1 | 2 | 3 | 4 | 5 |
| 11. General education level for most people. | 1 | 2 | 3 | 4 | 5 |
| 12. Education style (such as class interaction, teacher's expectation). | 1 | 2 | 3 | 4 | 5 |
| 13. Religion (the dominant religion in your own country and in the
U.S.). | 1 | 2 | 3 | 4 | 5 |
| 14. Family structure (such as the general size of family, generations living
together). | 1 | 2 | 3 | 4 | 5 |
| 15. The usual age of getting married. | 1 | 2 | 3 | 4 | 5 |
| 16. The values of family. | 1 | 2 | 3 | 4 | 5 |

Appendix E: English Self-Confidence Scale

Directions: The statements on this scale describe your self-confidence in using English. For each statement, please indicate the degree of your agreement using a 5-point scale. 1= Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree.

1. I believe that I am capable of reading and understanding most texts in English. 1 2 3 4 5
2. I feel that I can understand someone speaking English quite well. 1 2 3 4 5
3. I know enough English to be able to write comfortably. 1 2 3 4 5
4. I believe that I know enough English to speak correctly. 1 2 3 4 5
5. I am confident in my ability to write English correctly. 1 2 3 4 5
6. Sometimes I feel uncomfortable speaking in English because of my accent. 1 2 3 4 5
7. I believe that my knowledge of English allows me to cope with most situations where I have to use English. 1 2 3 4 5
8. When I need to make a telephone call in English, most of the time I am confident that I can do. 1 2 3 4 5
9. Every time that I meet an English speaking person and I speak with him/her in English, I feel easy and confident. 1 2 3 4 5
10. In a restaurant, I feel confident when I have to order a meal in English. 1 2 3 4 5
11. I feel confident and relaxed when I have to ask for directions in English. 1 2 3 4 5
12. I feel comfortable when I speak English among friends where there are people who speak English. 1 2 3 4 5

Appendix F: Psychological Adjustment Scale

Directions: The statements on this scale describe your psychological adjustment **since you came to the U.S.** For each statement, please indicate the degree of your agreement using a 5-point scale.

1= Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree.

1. I feel I am able to do my schoolwork as well as most other international students. 1 2 3 4 5
2. I feel I am able to do my schoolwork as well as most other American students. 1 2 3 4 5
3. I take a positive attitude toward myself after I came to the U.S. 1 2 3 4 5
4. Overall, I am satisfied with myself and my life after I came to the U.S. 1 2 3 4 5
5. I feel upset often since I came to the U.S. 1 2 3 4 5
6. I feel more discouraged about my future than I used to be since I came to the U.S. 1 2 3 4 5
7. I often feel like I am a failure since I came to the U.S. 1 2 3 4 5
8. I am not as confident as I used to be since I came to the U.S. 1 2 3 4 5
9. I cry more than I used to since I came to the U.S. 1 2 3 4 5
10. I don't consider myself as worthwhile and useful as I used to since I came to the U.S.
11. I can't concentrate as well as usual since I came to the U.S. 1 2 3 4 5
12. I often can't sleep well after I came to the U.S. 1 2 3 4 5
13. I am more irritable than usual. 1 2 3 4 5
14. Sometimes I feel I am treated differently in an uncomfortable way because I am a foreign student. 1 2 3 4 5
15. I feel homesick quite often. 1 2 3 4 5
16. I miss the people and country of my origin. 1 2 3 4 5
17. I feel uncomfortable to adjust myself to American cultural environment. 1 2 3 4 5
18. I often feel lonely and isolated since I came to the U.S. 1 2 3 4 5
19. I do not have a sense of belonging here. 1 2 3 4 5
20. I feel more anxious than I used to since I came to the U.S. 1 2 3 4 5

Appendix G: Social Difficulty Scale

Directions: Please indicate how much difficulty you experience in the U.S. in each of the following areas. Use the following 1 to 5 scale:

1 = no difficulty; 2 = slight difficulty; 3 = moderate difficulty; 4 = great difficulty; 5 = extreme difficulty.

- | | | | | | |
|--|---|---|---|---|---|
| 1. Making friends with Americans. | 1 | 2 | 3 | 4 | 5 |
| 2. Making friends with people from different cultural background (international friends, other than Americans). | 1 | 2 | 3 | 4 | 5 |
| 3. Finding food that you enjoy. | 1 | 2 | 3 | 4 | 5 |
| 4. Following rules and regulations in the American society. | 1 | 2 | 3 | 4 | 5 |
| 5. Dealing with people in authority. | 1 | 2 | 3 | 4 | 5 |
| 6. Taking an American perspective on the culture. | 1 | 2 | 3 | 4 | 5 |
| 7. Using the transportation system. | 1 | 2 | 3 | 4 | 5 |
| 8. Dealing with bureaucracy. | 1 | 2 | 3 | 4 | 5 |
| 9. Understanding American value system. | 1 | 2 | 3 | 4 | 5 |
| 10. Making yourself understood. | 1 | 2 | 3 | 4 | 5 |
| 11. Seeing things from an American point of view. | 1 | 2 | 3 | 4 | 5 |
| 12. Going shopping. | 1 | 2 | 3 | 4 | 5 |
| 13. Understanding American jokes and humor. | 1 | 2 | 3 | 4 | 5 |
| 14. Going to social gatherings of different cultures. | 1 | 2 | 3 | 4 | 5 |
| 15. Communicating with people of a different ethnic group. | 1 | 2 | 3 | 4 | 5 |
| 16. Understanding ethnic or cultural differences. | 1 | 2 | 3 | 4 | 5 |
| 17. Making a phone call for customer service. | 1 | 2 | 3 | 4 | 5 |
| 18. Attending religious activities. | 1 | 2 | 3 | 4 | 5 |
| 19. Understanding the U.S. political system. | 1 | 2 | 3 | 4 | 5 |
| 20. Dealing with the climate. | 1 | 2 | 3 | 4 | 5 |
| 21. Understanding the American world view. | 1 | 2 | 3 | 4 | 5 |
| 22. Getting adapted to the pace of life. | 1 | 2 | 3 | 4 | 5 |

Appendix H: Consent Form

Title: International students' cross-cultural adjustment in the U.S.: The roles of acculturation strategies, self-construals, perceived cultural distance and English self-confidence

Conducted By: Wei-Hsuan Serena Wang, Doctoral student, Department of Educational Psychology. Telephone: (512) 587-5852. Email: loso@mail.utexas.edu. Supervisors: Dr. Marie-Anne Suizzo & Dr. Toni Falbo.

You are being asked to participate in a research study. This form provides you with information about the study. As the person in charge of this research, I will describe this study to you and answer all of your questions. Please read the information below and ask any questions you might have before deciding whether or not to take part. Your participation is entirely voluntary. You can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You can stop your participation at any time and your refusal will not impact current or future relationships with UT Austin or participating sites. To do so simply tell the researcher you wish to stop participation. The researcher will provide you with a copy of this consent for your records.

The purpose of this study is to gain a better understanding of how international students' acculturation strategies, self-views in relation to others, perceived cultural distance, and English self-confidence influence their cross-cultural adaptation while they study in the U.S.

If you agree to be in this study, we will ask you to fill out a set of questionnaires.

Total estimated time to participate in this study is 20 minutes.

The risks associated with being in the study are no greater than everyday life. The content of the questionnaires is unlikely to cause any serious negative effect. However, it is possible for those who are experiencing difficulties related to cross-cultural adaptations to feel uncomfortable while answering some questions. If the survey brings up discomfort

that you would like to deal with more deeply, you can contact the UT Counseling Center at (512) 471-3515. If you wish to discuss the information above or any other risks you may experience, you may contact the Principal Investigator listed on the front page of this form.

The Benefits of being in the study are that you will benefit by gaining an awareness of your cross-cultural adaptation situation. In addition, when the study is completed, you will have the opportunity to learn the results of the study and understand the value of your contribution as a participant.

Compensation: No compensation will be offered.

Confidentiality and Privacy Protections: The records of this study will be stored securely and kept confidential. Authorized persons from The University of Texas at Austin and members of the Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a subject. Throughout the study, I will notify you of new information that may become available and that might affect your decision to remain in the study.

Contacts and Questions: If you have any questions about the study please ask now. If you have questions later, want additional information, or wish to withdraw your participation, please contact me. My name, phone number, and email are at the top of the first page. If you have questions about your rights as a research participant, complaints, concerns, or questions about the research, please contact Jody Jensen, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects at (512) 232-2685 or the Office of Research Support and Compliance at (512) 471-8871 or email: orosc@uts.cc.utexas.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information and have sufficient information to make a decision about participating in this study. I consent to participate in the study.

Signature of Participant

Date: _____

Signature of Person Obtaining Consent

Date: _____

Signature of Investigator

Date: _____

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